Hangman:

clear, clc % starts the code how all programs should

% List of possible words (know the exact number)
words = {'abandon','ability','able','about','above','abroad','absence'...
'absent','absolute','abstract','abuse','academic','accept'...
'acceptable','acceptance','access','accident','accompany','account'...
'accountant','accurate','accuse','ache','achieve','acquire','acquit'...
'across','act','action','active','activity','actor','actress'...
'actual','adapt','add','addition','address','adequate','adjourn'...
'adjust','administration','admiration','admire','admission','admit'...
'adopt','adult','advance','adventure','advertisement','advise'...
'affair','affect','affectionate','afford','afraid','after'...
'afternoon','again','against','age','agency','agent','aggravation'...
'aggressive','ago','agreement','agriculture','ahead','aid','aim'...
'air','airplane','airport','aisle','alarm','alert','alibi'...
'alimony','alive','all','allergy','allow','allowance','almost'...
'alone','along','alphabet','already','also','alter','alternative'...
'although','altogether','always','amateur','amaze','ambitious'...
'among','amount','analogy','analysis','analyze','and','anger'...
'angle','anguish','animal','ankle','announce','annoying','annual'...
'another','answer','antihistamine','anxiety','anxious','anybody'...
'anything','anywhere','apart','apartment','apologize','apology'...
'apparently','appeal','appear','appearance','appetite','apple'...
'application','apply','appoint','appreciate','approach'...
'appropriate','approval','approximate','aquifer','arch','architect'...
'area','arena','argument','arm','army','around','arrange'...
'arrangement','arrest','arrival','arrive','arrow','art','article'...
'artificial','artist','artistic','as','ashamed','aside','ask'...
'asleep','aspirin','assignment','assist','assistant','associate'...
'assume','at','athlete','athletic','atmosphere','attach','attack'...
'attempt','attend','attention','attitude','attorney','attraction'...
'attractive','audience','aunt','author','authority','automatic'...
'automobile','autumn','available','avenue','average','avoid','awake'...
'award','aware','away','baby','bachelor','back','backhand'...
'backward','bacterium','bad','badly','bag','baggage','bake'...
'balance','ball','band','bandage','bang','bank','bankrupt','bar'...
'barber','bare','bark','barn','barometer','barrier','bartender'...
'base','baseball','basic','basically','basis','basket','basketball'...
'bath','bathe','bathroom','batter','battery','battle','be','beach'...
'beak','bean','bear','beard','beat','beautiful','beauty','because'...
'become','bed','beef','before','beg','begin','beginning','behalf'...
'behave','behavior','behind','belief','believe','bell','belong'...
'below','belt','bench','bend','beneath','benefit','beside','best'...
'bet','better','between','beyond','bibliography','bicycle','bid'...

'big','bill','bind','biodegradable','biodiversity','biology','bird'...
'birth','bit','bite','bitter','black','blade','blame','blank'...
'blanket','bleed','blend','blind','blizzard','block','blow','blue'...
'board','boast','boat','body','boil','bold','bomb','bond','bone'...
'bonus','bookkeeper','boot','border','bore','boredom','born'...
'borrow','boss','both','bother','bottle','bottom','bounce','bound'...
'boundary','bow','bowl','box','boy','brace','brain','branch','brand'...
'brave','bread','break','breakfast','breath','breathe','breezy'...
'bribe','bride','bridge','brief','bright','brilliant','broken'...
'bronchitis','brother','bruise','budget','builder','bulkhead'...
'businessman','businesswoman','butcher','cage','cake','calculate'...
'calender','calf','call','calm','camera','camp','campaign','campus'...
'can','cancel','cancer','candidate','candy','capable','capacity'...
'capital','captain','capture','car','carbon','carcinogen','card'...
'care','career','careful','careless','carpenter','carpet','carrot'...
'carry','case','cashier','cast','castle','cat','catalog','catch'...
'catcher','category','cattle','cause','caution','cautious','cave'...
'cease','ceiling','celebrate','celebration','cell','cent','center'...
'central','century','ceremony','certainly','certainty','chain'...
'chair','challenge','chamber','championship','chance','change'...
'channel','chaos','chapter','character','characteristic','charge'...
'charity','charming','chart','chase','chat','cheap','cheat','check'...
'cheek','cheerful','cheese','chef','chemical','chemistry','chest'...
'chew','chicken','chief','childhood','chilly','chin','chip'...
'chocolate','choice','choke','choose','chop','church','circle'...
'circumstance','citation','citizen','city','civil','claim'...
'clap','clarify','classify','clause','clay','clean','clear','clerk'...
'clever','click','cliff','climate','climb','clinic','clock','close'...
'closet','clothes','clothing','cloudy','club','coach','coal','coast'...
'coat','cockpit','code','coffee','coherent','coin','cold','collapse'...
'collar','collect','collection','college','color','column','comb'...
'combination','combine','come','comedy','comfortable','command'...
'comment','commercial','commission','committee','common'...
'communication','community','commute','company','comparison'...
'compassion','compete','competition','competitive','complaint'...
'complete','completion','complex','complicated','component'...
'compose','composition','compost','compound','comprehensive'...
'compulsive','computer','concentrate','concentration','concept'...
'concern','concert','conclude','conclusion','concrete','condition'...
'conduct','conference','confidence','confidence','confine','confirm'...
'conflict','confusion','congress','conjunction','connection'...
'conscious','consent','conservationist','conservative','consider'...
'considerable','consideration','consistent','constantly'...
'constitution','construction','consult','consumer','contact'...
'contagious','contain','container','contamination','contemporary'...
'contentment','contest','context','continent','continually'...

'contract','contrast','contribution','control','convenient'...
'conversation','convert','convince','cook','cookie','cool'...
'cooperate','cooperation','cope','copy','copyright','core','corn'...
'corner','corporate','corporation','correct','correspond','cost'...
'cottage','cotton','cough','could','council','count','country'...
'couple','courageous','course','court','cousin','cover','cow'...
'cowardly','crack','craft','crash','crazy','cream','creative'...
'creature','credit','crew','criminal','crisis','crisp','cruel'...
'crutch','curiosity','currency','custody','customs','cut','cynical'...
'dad','daily','dam','damage','damp','dance','danger','dangerous'...
'dare','dark','data','date','daughter','dawn','day','dead','deaf'...
'deal','dear','death','debate','debt','decade','decay','decide'...
'decision','decisive','declare','decline','decongestant','decorate'...
'decoration','decrease','deep','defeat','defend','defendant'...
'defense','defiance','deficit','define','definite','definition'...
'deforestation','degree','delay','deliberate','delicate'...
'delicious','delight','deliver','demand','democracy','demonstrate'...
'dentist','deny','department','departure','dependence','deposit'...
'depress','depression','depth','derive','describe','description'...
'desert','deserve','design','designer','desire','desk','desperate'...
'despite','destroy','destruction','detail','determine','develop'...
'developer','development','device','devote','diamond','diary'...
'dictionary','die','diet','different','difficult','dig'...
'dimension','dinner','dip','direct','direction','dirt','dirty'...
'disagreement','disappear','disappointment','disapproval'...
'disapprove','disaster','disc','discipline','discovery','discuss'...
'discussion','disease','disgust','dish','dishonest','dislike'...
'dismay','dismiss','display','disposable','dispute','disrespect'...
'dissolve','distance','distant','distinct','distinguish','distress'...
'distribute','distribution','district','distrust','disturb','dive'...
'diversity','divide','division','divorce','dizzy','do','doctor'...
'document','dog','doll','dollar','domestic','dominant','door','dorm'...
'dot','double','doubt','down','draft','dribble','dugout','dusk'...
'each','eager','ear','earlier','earlobe','early','earn','earth'...
'ease','east','easygoing','eat','ecology','economy','edge','edit'...
'edition','education','effect','effective','effort','egg','either'...
'elastic','elbow','election','electrician','electronic','element'...
'else','elsewhere','embarrass','embarrassment','emerge','emergency'...
'emission','emotion','emotional','emphasis','emphasize','empire'...
'employ','employee','employment','empty','enable','encounter'...
'encourage','end','endangered','enemy','energy','engage','engine'...
'engineer','enjoy','enjoyment','enormous','enough','ensure','enter'...
'entertain','entertainment','enthusiasm','enthusiastic','entire'...
'entrance','entry','envelope','environment','environmentalist'...
'envy','equal','equipment','equivalent','erase','erosion','error'...
'escape','especially','essay','essential','establish','estate'...

'estimate','ethnic','evaluate','even','evening','event','eventually'...
'ever','every','everybody','everyday','everyone','everything'...
'everywhere','evidence','evident','evil','exact','exaggerate','exam'...
'examination','examine','exceed','excellent','except','exception'...
'excess','exchange','excitement','exclude','excuse','executive'...
'exercise','extinct','extinction','extroverted','eyebrow','eyelash'...
'eyelid','fabric','face','factor','faculty','fail','failure','faint'...
'fair','faith','fake','fall','false','fame','familiar','family'...
'famous','fan','fancy','far','farmer','fashion','fast','fasten'...
'fat','fate','father','fault','favor','favorite','fearful','feather'...
'feature','federal','fee','feed','feel','feeling','fellow','felon'...
'female','fence','festival','fever','few','fiber','field','fierce'...
'fight','figure','fill','filmmaker','final','finally','financial'...
'find','fine','finger','finish','fire','firm','first','fiscal'...
'fish','fisherman','fit','fix','flag','flame','flash','flat'...
'flavor','flavor','flesh','flexible','flight','float','flood'...
'floor','flour','flow','flower','flu','fluid','flurries','fly'...
'focus','fog','fold','football','footnote','forearm','forecast'...
'forehead','forever','formerly','fossil','fraternity','fraud'...
'free','frequently','friendly','frustration','fun','furniture'...
'fury','gain','gallon','game','gap','garage','garbage','garden'...
'gas','gate','gather','gear','gender','gene','general','generate'...
'generation','generosity','generous','gentle','gentleman','genuine'...
'geography','geothermal','get','giant','gift','girl','give','glad'...
'glass','global','glory','glove','glow','glue','go','goal'...
'goalkeeper','god','gold','golden','good','goodbye','govern'...
'government','governor','grab','graceful','grade','gradual'...
'graduate','grain','grammar','grand','grandchild','granddaughter'...
'grandfather','grandfather','grandmother','grandparent','grandson'...
'grant','grass','grateful','grave','gravity','gray','great','greed'...
'green','greet','gregarious','grief','grind','grocery','groom'...
'grocery','groom','groove','ground','group','grow','guarantee'...
'guard','guardian','guess','guest','guide','guilty','gullible','gum'...
'gun','gust','guy','habitat','hail','hair','half','hammer','hand'...
'handle','handsome','handwriting','hang','happen','happy','harbor'...
'hard','hardly','hardware','harm','harsh','harvest','hat','hatch'...
'hatred','hazy','head','headache','heal','health','hear','hearing'...
'heart','heat','heaven','heavy','heel','height','hello','helpful'...
'herbicide','hero','herself','hesitate','hide','high','highlight'...
'highway','hill','himself','hint','hip','hire','historical'...
'history','hit','hobby','hockey','hold','hole','holiday','hollow'...
'holy','home','homework','honest','honor','hook','hope','hopeful'...
'horizontal','horn','horror','horse','hose','hospital','host'...
'hostility','hot','hotel','hour','household','how','however','hug'...
'huge','humid','humidity','hurricane','husband','ice','idea','ideal'...
'identical','identification','identify','ignore','ill','illegal'...

'illness','image','imaginary','imagination','imitate','immediate'...
'immoral','impact','impatience','import','important','impossible'...
'impress','impressive','improve','impulsive','inch','incident'...
'include','income','increase','indeed','independence','independent'...
'index','indicate','indict','indictment','indigestion','individual'...
'industry','inevitable','infant','infect','infection','infield'...
'inflation','influence','inform','information','ingredient'...
'initial','initiative','injection','injure','injury','ink','inmate'...
'inner','innocent','insect','insert','inside','install','instance'...
'instant','instead','institute','instruction','instrument'...
'insult','insurance','intellectual','intelligent','intend','intense'...
'intention','interest','interested','interior','interjection'...
'internal','international','interpret','interrupt','interval'...
'interview','into','introduce','introduction','introduction'...
'introverted','invade','invent','investigate','investment'...
'itinerary','jacket','jail','jam','jar','jaw','jealous','jelly'...
'jet','jewel','job','join','joint','joke','journal','joy','judge'...
'judgement','juice','jumbo','jump','junior','jurisdiction','juror'...
'jury','just','justice','keen','keep','key','kick','kickoff','kid'...
'kill','kind','kindness','king','kingdom','kiss','kitchen','knee'...
'kneel','knife','knit','knock','knot','know','knowledge','knuckle'...
'label','labor','laboratory','lack','ladder','lady','lake','lamp'...
'land','landfill','landing','landlord','lane','language','large'...
'last','late','lately','later','latter','laugh','lavatory','law'...
'lawyer','lay','layer','layoff','lazy','lead','leader','leaf'...
'league','leak','lean','learn','least','leather','leave','lecture'...
'left','leg','legal','lemon','lend','length','less','lesson','let'...
'letter','level','liberty','library','license','lid','lie','life'...
'lift','light','lightning','like','limit','line','lip','liquid'...
'list','listen','literary','literature','litigate','little','live'...
'load','local','locate','lock','locker','logic','loneliness'...
'lonely','long','longing','look','loose','lord','lose','loss','lost'...
'lot','loud','love','low','lower','loyal','luck','luggage','lump'...
'lunch','lung','lust','machine','mad','magazine','magic','mail'...
'main','maintain','major','majority','make','male','malice','man'...
'manage','management','manager','manner','manufacture','many','map'...
'march','margin','mark','marriage','mass','master','match','mate'...
'material','mathematics','matriculate','matter','maximum','may'...
'maybe','mayor','meal','mean','meaning','meanwhile','measurement'...
'meat','mechanical','mechanism','media','mediation','medical'...
'medication','medicine','medium','meet','meeting','melt'...
'membership','memory','mental','mention','menu','mercy','mere'...
'merry','mess','message','metal','metaphor','meter','methane'...
'method','middle','midnight','might','mild','mile','military'...
'milk','mill','mind','mine','mineral','minimum','minister','minor'...
'minute','miracle','mirror','misery','miss','mission','mistake'...

'mix','mixture','mobile','mode','model','moderate','modern'...
'modest','mom','moment','money','monitor','month','mood','moon'...
'moral','more','morning','most','mother','motion','motor','mount'...
'mountain','mouse','move','movement','movie','much','mud','muggy'...
'multiply','murder','muscle','museum','music','musical','must'...
'mustache','mutual','mysterious','mystery','nail','naked','name'...
'narrow','national','native','natural','naturally','nature','nausea'...
'navy','near','nearby','nearly','neat','necessary','neck','need'...
'needle','negative','negligence','negligent','neighbor'...
'neighborhood','neither','nephew','nerve','nervous','nest','net'...
'network','neutral','never','nevertheless','new','newly','news'...
'newspaper','next','nice','niece','night','no','nobody','noise'...
'noisy','noon','nor','normal','normally','nostril','notebook'...
'notes','now','nuclear','nurse','nutritionist','oath','obey'...
'object','objection','objective','observation','observe','obsessive'...
'obtain','obvious','occasion','occupation','occupy','occur','ocean'...
'odd','odor','off','offend','offense','offensive','offer','officer'...
'official','often','oil','old','once','one','only','onto','open'...
'opening','operate','operation','opinion','opponent','opportunity'...
'oppose','opposite','opposition','optimistic','option','orange'...
'order','ordinary','organ','organic','organization','organize'...
'origin','original','other','otherwise','ought','ounce','our','out'...
'outcome','outdoors','outgoing','overbook','overcast','oxygen'...
'ozone','pace','pack','package','pad','page','painful','paint'...
'painting','pair','pale','palm','pan','panel','panic','pants'...
'paper','parade','paragraph','parallel','paraphrase','parent','park'...
'parliament','part','participate','particular','partly','partner'...
'party','pass','passage','passion','passport','past','paste','pat'...
'patch','patent','path','patience','patient','pause','pay'...
'payment','peace','peaceful','peak','peel','pen','penalty'...
'pencil','penny','people','pepper','percent','perfect','perform'...
'performance','performer','perfume','perhaps','period','permanent'...
'permission','permit','persistent','personality','persuade'...
'pessimism','pessimistic','pest','pesticide','pet','petal'...
'petroleum','pharmacist','phase','philosophy','phone'...
'photograph','photographer','phrase','physical','physician','physics'...
'piano','pick','picture','piece','pig','pile','pill','pilot','pin'...
'pink','pinkie','pipe','pitch','pitcher','pity','place','plain'...
'plan','planet','plant','plastic','plate','platform','play','player'...
'plea','pleasant','please','pleasure','plenty','plot','plumber'...
'plus','pocket','poem','poetry','point','poison','poisonous','pole'...
'police','policy','polish','polite','politics','pollution','pompous'...
'pond','pool','poor','pop','popular','population','port','portion'...
'pose','position','positive','possess','possession','possibility'...
'possible','post','postage','postgraduate','pot','potato'...
'potential','pound','pour','poverty','power','practical','praise'...

'pray','precipitation','precise','predict','prefer','preference'...
'pregnant','prejudice','premise','preparation','prepare'...
'preposition','prerequisite','prescribe','presence','present'...
'preserve','president','press','pressure','pretend','pretty'...
'prevent','previous','price','pride','primary','princess'...
'principal','print','prior','prison','prisoner','private'...
'privilege','prize','pro','probable','probation','problem'...
'procedure','proceed','professor','profit','programmer','progress'...
'promotion','propeller','property','prosecute','psychologist','puck'...
'pupil','qualification','qualify','quality','quantity','quarter'...
'quarterly','queen','question','quick','quiet','quit','quite','quiz'...
'quotation','quote','race','racial','radio','rage','rail','railroad'...
'rain','raise','range','rank','rapid','rare','rarely','rash','rate'...
'rather','ratio','rational','raw','reach','react','reaction','read'...
'reader','ready','real','realistic','reality','realize','really'...
'rear','reason','reasonable','recall','receive','recent','reception'...
'receptionist','recession','recognition','recognize','recommend'...
'record','recover','recreational','recycle','red','reduce'...
'reduction','refer','referee','reference','reflect','reform'...
'refrigerator','refuse','regard','region','register','regret'...
'regular','regulation','reject','relate','relation','relationship'...
'relative','relax','release','relevant','reliable','relief'...
'relieve','religion','rely','remain','remark','remarkable'...
'remarkable','remember','remind','remove','renewable','rent'...
'repair','repeat','replace','reply','report','represent'...
'representative','reproduce','republic','reputation','request'...
'require','requirement','rescue','research','reserve','resident'...
'resign','resist','resistance','resolve','resource','respect'...
'respond','response','responsibility','rest','restaurant','restore'...
'restrain','restrict','result','retain','retirement','return'...
'reveal','reverse','review','revise','revision','revolution'...
'reward','room','roommate','round','runway','ruthless','sacrifice'...
'sad','sadness','safe','safety','sail','salad','salary','sale'...
'salesman','saleswoman','salt','same','sample','sand','sandwich'...
'sarcastic','satisfaction','satisfy','sauce','save','savings','say'...
'scale','scalp','scare','scenery','schedule','scheme','school'...
'science','scientist','scissors','scope','scoreboard','scorn'...
'scratch','scream','screen','screw','sea','seal','search','season'...
'seat','second','secondary','secret','secretary','secretive'...
'section','secure','security','see','seed','seek','seem','seize'...
'seldom','select','selection','self','selfish','sell','semester'...
'semifinal','senate','send','senior','sense','sensible','sensitive'...
'sentence','separate','series','serious','servant','serve','service'...
'session','set','settle','several','severe','sew','shade','shadow'...
'shake','shall','shallow','shame','shape','share','sharp','shave'...
'sheep','sheet','shelf','shell','shelter','shift','shin','shine'...

'ship','shirt','shock','shoe','shoot','shop','shore','short','shot'...
'should','shoulder','shout','show','shower','shut','shy','sick'...
'side','sight','sign','signal','signature','significant','silence'...
'silent','silk','silly','silver','simple','sin','since','sincere'...
'sing','singer','single','sink','sir','sister','sit','site'...
'situation','size','skill','skin','skirt','sky','slang','slap'...
'sleep','sleeve','slice','slide','slight','slip','slope','slow'...
'small','smart','smell','smile','smog','smoke','smooth','snake'...
'sneeze','snow','so','soap','sociable','society','sock','soft'...
'software','soil','solar','soldier','solid','solution','solve'...
'some','somebody','somehow','someone','something','sometimes'...
'somewhat','somewhere','son','song','soon','sore','sorority'...
'sorrow','sorry','sort','soul','sound','soup','sour','source'...
'south','space','spare','speak','speaker','special','specific'...
'specify','spectator','speech','speed','spell','spend','spending'...
'spice','spicy','spill','spin','spirit','spiritual','spite','splint'...
'split','spoil','spoon','sport','sportscaster','spot','sprain'...
'spray','spread','spring','square','squeeze','stable','stadium'...
'staff','stage','stair','stamp','stand','standard','standby','star'...
'stare','start','state','statement','station','statue','status'...
'statute','stay','steady','steal','steam','steel','steep','steer'...
'stem','step','stepfather','stepmother','sticky','stiff','still'...
'sting','stir','stitch','stock','stomach','stone','stop','storage'...
'store','storm','story','stove','straight','strain','stranger'...
'strap','strategy','stream','street','strength','strengthen'...
'stress','stretch','strict','strike','string','strip','stripe'...
'stroke','strong','structure','struggle','stubborn','student'...
'study','stuff','stupid','style','subject','submit','substance'...
'substantial','substitute','succeed','successful','such','suck'...
'sudden','sue','suffer','sufficient','sugar','suggestion','suit'...
'suitable','sum','summary','summer','sunny','sunshine','superficial'...
'support','surgeon','sustainable','syllabus','sympathy','table'...
'tactful','tactless','tail','take','takeoff','talent','talk','tall'...
'tank','tap','tape','target','task','taste','tax','taxi','tea'...
'teach','teacher','team','teammate','tear','technical','technique'...
'technology','telephone','television','tell','temper','temperature'...
'temple','temporary','tempt','tenant','tendency','tendon','tense'...
'tension','tent','term','terrible','territory','terror','test'...
'testify','text','textbook','texture','thanks','that','theater'...
'their','them','theme','themselves','theory','therapist','there'...
'therefore','thermometer','thesis','thick','thief','thigh','thin'...
'thing','thirsty','this','thorough','though','thread','threat'...
'throat','through','throughout','throw','thumb','thunder'...
'thunderstorm','thus','ticket','tide','tie','tight','tilt','time'...
'tin','tiny','tip','tire','tired','title','today','toe','together'...
'toilet','tomorrow','tone','tongue','tonight','tool','tooth','top'...

'topic','tornado','total','touch','tough','tour','tournament'...
'toward','towel','tower','town','toxic','toy','trace','track'...
'trade','tradition','traditional','traffic','trail','train'...
'trainer','training','transcript','transfer','transform'...
'transition','translation','translator','transparent','transport'...
'transportation','trap','trash','travel','treasure','treat'...
'treatment','tree','trend','trial','triangle','tribe','trick'...
'trimester','trip','troop','trophy','tropical','trouble','tuition'...
'turbulence','ugly','umbrella','umpire','unable','uncle','under'...
'underdog','undergo','undergraduate','underground','underneath'...
'understanding','undertake','undertaker','undo','unemployment'...
'unfortunately','uniform','union','unique','unit','unite'...
'university','unknown','unless','unlikely','until','unusual','up'...
'upon','upper','upset','upstairs','upward','urban','urge','urgent'...
'use','useful','user','usual','usually','vacation','valley'...
'valuable','value','variation','variety','various','vary','vast'...
'vegetable','vehicle','verb','verdict','version','very','vessel'...
'veterinarian','victim','victory','video','videographer','view'...
'village','violence','violent','virtually','virtue','virus'...
'visible','vision','visit','visitor','voice','volume','vomit','vote'...
'wage','waist','wait','waiter','waitress','wake','walk','wall'...
'wallet','wander','want','war','warm','warning','wash','waste'...
'watch','water','wave','wax','way','weakness','wealth','weapon'...
'wear','weather','weave','web''wedding','weekend','weekly','weigh'...
'weight','welcome','welfare','well','west','western','wetland'...
'what','whatever','wheat','wheel','where','whether','which','while'...
'whisper','whistle','white','who','whole','whom','whose','why'...
'widely','widespread','width','wife','wild','wildlife','willing'...
'win','wind','window','windy','wine','wing','winner','winter','wipe'...
'wire','wisdom','wise','wish','withdraw','within','without'...
'witness','witty','wolf','woman','wonder','wonderful','wooden'...
'wool','word','work','worker','world','worry','worse','worship'...
'worst','worth','would','wound','wrap','wrath','wreck','wrinkle'...
'wrist','write','writer','writing','wrong','yard','yawn','year'...
'yearly','yell','yellow','yes','yesterday','yet','young','youth'...
'zero','zone','zoo'};
% Words found on http://learnersdictionary.com/3000-words/alpha/e/4
% word of wise if you decide to make one, just use an m-file

num = rand; % chooses a random number
num = 2744 * num; % The 2744 is for the total # of words
num = ceil(num); % rounds the numbers to be positive integers
answer = words(num); % the answer is the selected word
answer = char(answer); % converts answer to characters

```matlab
len = length(answer); % sets len as length of answer
for i = 1 : len; % the i is equal to the length of answer (1-length)
let(i) = '*'; % changes each character/letter into an *
end
Word = let % display word in * form to player

% lines 406 through 416 are used to generate the word
% lines 421 through 487 are used to actually play the game

m = 1; % m = Misses
fig1 = imshow('hang_start.jpg');

while (m < 7)
fprintf('\n Type a letter and hit enter%\n', m)
ch = input(': ','s'); % askes for imput after : as a string
n = 0; % used to determine if letter is correct later
for i = 1 : len
if (ch == answer(i)) % this whole if statement is used decide
let(i) = ch; % if the entered character is correct or
n = n + 1; % not by adding a 1 to n if it's right
end % also if the letter is right it changes from
end % an * to the letter

if n == 0; % if n true equals 0 then the letter was wrong
fprintf('\n Incorrect Letter\n')
m = m + 1; %adds one miss
Word = let %display the word as of current
if m == 2 % if misses is 2
FigM1 = imshow('hang_1.jpg');
end
if m == 3 % if misses is 3
FigM2 = imshow('hang_2.jpg');
end
if m == 4 % if misses is 4
FigM3 = imshow('hang_3.jpg');
end
if m == 5 % if misses is 5
FigM4 = imshow('hang_4.jpg');
end
if m == 6 % if misses is 6
FigM5 = imshow('hang_5.jpg');
end
if m == 7 % if misses is 7
fprintf('\n You Lose\n')
FA = answer; % displays correct/final answer
fprintf('\n Correct Answer: %s \n',FA)
```

```matlab
FigFinal = imshow('hang_6L.jpg');
end

else
fprintf('\n Correct Letter\n')
Word = let %displays word as of current progress
end
if Word == answer % for when what has been entered matches the answer
fprintf ('\n You Win\n')
if m == 1 % if misses is 1
FigW1 = imshow('hang_0W.jpg');
end
if m == 2 % if misses is 2
FigW2 = imshow('hang_1W.jpg');
end
if m == 3 % if misses is 3
FigW3 = imshow('hang_2W.jpg');
end
if m == 4 % if misses is 4
FigW4 = imshow('hang_3W.jpg');
end
if m == 5 % if misses is 5
FigW5 = imshow('hang_4W.jpg');
end
if m == 6 % if misses is 6
FigW6 = imshow('hang_5W.jpg');
end
break % force ends the while loop to end the game
end
end
```