## Test 4:

```
// Run motor one at a constant speed (15% power) for 2.5 second.
celerate(1,0,15,2.5);
motorSpeed(1,15);
goFor(1);
// Brake motor one.
brake(1);
// Accelerate motor 2 to 27 percent over 4 seconds
celerate(2,0,27,4);
// Set motor 2 to 27 percent (const)
motorSpeed(2,27);
// Run all motors at current settins for 2.7 seconds
goFor(2.7);
// Decelerate motor 2 to 15 percent over 1 second
celerate(2,27,15,1);
// Brake motor 2
brake(2);
// Reverse motor 2
reverse(2);
// accelerate motor 1 to 31 percent over 2 seconds
celerate(1,0,31,2);
// accelerate motor 2 to 31 percent over 2 seconds
celerate(2,0,31,2);
// set motor 1 and 2 to 35%
motorSpeed(2,35);
motorSpeed(1,35);
// run motors for 1 second
goFor(1);
// brake motor 2
brake(2);
// run all motors for 3 seconds
goFor(3);
```

## Final Two design testing:

```
motorSpeed(4,30);
goFor(3);
reverse(4);
motorSpeed(4,30);
goFor(4);
brake(4);
```

## Battery Testing:

```
int mSpeed=25;
int brke=35;
```

```
celerate(4,0,mSpeed,1);
motorSpeed(4, mSpeed);
goFor(2.5);
//stop
brake(4);
reverse(4);
celerate(4,0,mSpeed+brke,1);
//still stopping
brake(4);
//Go Forward
reverse(4);
celerate(4,0,mSpeed,1);
goFor(2.5);
brake(4);
//do it again the other way
reverse(4);
//Go Forward
celerate(4,0,mSpeed,1);
motorSpeed(4, mSpeed);
goFor(2.5);
//stop
brake(4);
reverse(4);
celerate(4,0,mSpeed+brke,1);
//still stopping
 brake(4);
 //Go Forward
 reverse(4);
 celerate(4,0,mSpeed,1);
 goFor(2.5);
 brake(4);
```

## Track Variance:

```
reverse(1);
reverse(2);
const unsigned int mSpeed=40;
celerate(4,0,mSpeed,1);
motorSpeed(1, mSpeed);
motorSpeed(2, mSpeed);
goFor(2.4);
brake(1);
brake(2);
```

## Performance Test 1:

```
motorSpeed(4,25);
goToAbsolutePosition(258);
powerBreak(0,0,7000);
brake(4);
```

## Performance Test 2, Distance:

```
motorSpeed(4,25);
goToAbsolutePosition(258);
powerBreak(0,0,7000);
brake(4);
motorSpeed(4,20);
goToRelativePosition(135);
brake(4);
goFor(5);
goFor(5);
brake(4);
reverse(4);
motorSpeed(4,45);
goFor(1);
```

## Performance Test 2, Time:

```
motorSpeed(4,25);
goFor(6.3);
powerBreak(0,0,7000);
brake(4);
motorSpeed(4,20);
goFor(4.5);
brake(4);
goFor(5);
goFor(5);
brake(4);
reverse(4);
motorSpeed(4,45);
goFor(1);
```

## Performance Test 3, Final Test:

```
motorSpeed(4,25);
goToAbsolutePosition(255);
powerBreak();
brake(4);
motorSpeed(4,20);
goToRelativePosition(128);
brake(4);
goFor(5);
goFor(5);
brake(4);
reverse(4);
motorSpeed(4,50);
goToRelativePosition(-235);
powerBreak(true);
motorSpeed(4,65);
goToRelativePosition(-100);
brake(4);
goToRelativePosition(-190);
powerBreak(true, 5000);
brake(4);
```