Each problem is worth 5 points.

1) Draw a flowchart corresponding to the pseudo-code given below.

Pseudo-code:

If(x == 4)
{
  x = x + 1
}
else
{
  x = x - 1
}
2) Write assembly code corresponding to the flowchart given below. Store i in register R6.

given:

.data
x: byte 0

```
mov.w #0, R6
```

```
loop_label:
cmp.w #9, R6
jge break
inc.b &x
inc.w R6
jmp loop_label
```

```
break:
```

```
loop: jmp loop
```

break: