Example 1

With a partner, determine the result of the following:

```
boolean button = false;

int x = 50;

int y = 50;

int w = 100;

int h = 75;


void setup() {

  size(200,200);

}


void draw() {

  if (mouseX > x && mouseX < x+w && mouseY > y && mouseY < y+h && mouseIsPressed) {

    button = true;

  } else {

    button = false;

  }

 if (button) {

    background(255);

    stroke(0);

  } else {

    background(0);

    stroke(255);

  }

  fill(175);

  rect(x,y,w,h);

}
```

Example 2

```
boolean button = false;

int x = 50;

int y = 50;

int w = 100;

int h = 75;


void setup() {

  size(200,200);

}


void draw() {

  if (button) {

    background(255);

    stroke(0);

  } else {

    background(0);

    stroke(255);

  }

  fill(175);

  rect(x,y,w,h);

}


void mousePressed() {

  if (mouseX > x && mouseX < x+w && mouseY > y && mouseY < y+h) {

    button = !button;

  }

}
```