

```
int IRtx = 8;
int indicator = 13;
int button = 11;

void setup() {
  pinMode(button, INPUT);
  pinMode(IRtx, OUTPUT);
  pinMode(indicator, OUTPUT);
}

void RedSend() {
  tone(IRtx, 38000); //Sending 1,0,0,0,
  delay(10);
  noTone(IRtx);
  delay(10);
  noTone(IRtx);
  delay(10);
  noTone(IRtx);
  delay(10);
}

void YellowSend() {
  noTone(IRtx); //Sending 0,1,0,0,
  delay(10);
  tone(IRtx, 38000);
  delay(10);
  noTone(IRtx);
  delay(10);
  noTone(IRtx);
  delay(10);
}

void GreenSend() {
  noTone(IRtx); //Sending 0,0,1,0,
  delay(10);
  noTone(IRtx);
  delay(10);
  tone(IRtx, 38000);
  delay(10);
  noTone(IRtx);
  delay(10);
}

void BlueSend() {
  noTone(IRtx); //Sending 0,0,0,1,
  delay(10);
  noTone(IRtx);
  delay(10);
  noTone(IRtx);
  delay(10);
  tone(IRtx, 38000);
  delay(10);
}

void loop() {
  while(digitalRead(button) == LOW) {
    delay(1); //waiting for a button push
  }
  digitalWrite(indicator, 1);
  tone(IRtx, 38000);
  delay(60); //startSignal
  noTone(IRtx);
  delay(5);
}
```

```

RedSend();
noTone(IRtx); //checkSignal so it does not
delay(10); //activate on a constant HIGH.
tone(IRtx,38000);
delay(70); //stopSignal
noTone(IRtx);
delay(1000); //allow button reset
digitalWrite(indicator,0);

while(digitalRead(button) == LOW){
    delay(1);
}
digitalWrite(indicator,1);
tone(IRtx,38000);
delay(60);
noTone(IRtx);
delay(5);
YellowSend();
noTone(IRtx);
delay(10);
tone(IRtx,38000);
delay(70);
noTone(IRtx);
delay(1000); //time to let the button reset
digitalWrite(indicator,0);

while(digitalRead(button) == LOW){
    delay(1);
}
digitalWrite(indicator,1);
tone(IRtx,38000);
delay(60);
noTone(IRtx);
delay(5);
GreenSend();
noTone(IRtx);
delay(10);
tone(IRtx,38000);
delay(70);
noTone(IRtx);
delay(1000); //time to let the button reset
digitalWrite(indicator,0);

while(digitalRead(button) == LOW){
    delay(1);
}
digitalWrite(indicator,1);
tone(IRtx,38000);
delay(60);
noTone(IRtx);
delay(5);
BlueSend();
noTone(IRtx);
delay(10);
tone(IRtx,38000);
delay(70);
noTone(IRtx);
delay(1000); //time to let the button reset
digitalWrite(indicator,0);
}

```