

```
int segA = 4;
int segB = 5;
int segC = 6;
int segD = 7;
int segE = 8;
int segF = 9;
int segG = 10;
int button = 2;
int winner1 = 11;
int winner2 = 12;
int SPEED = 200;
int stepCount = 0;

int bitOrder[] = {segF, segA, segB, segG, segE, segD, segC, segG};

void setup() {
  pinMode(segA, OUTPUT);
  pinMode(segB, OUTPUT);
  pinMode(segC, OUTPUT);
  pinMode(segD, OUTPUT);
  pinMode(segE, OUTPUT);
  pinMode(segF, OUTPUT);
  pinMode(segG, OUTPUT);
  pinMode(winner1, OUTPUT);
  pinMode(winner2, OUTPUT);
  pinMode(button, INPUT);
}

void winning() {
  if(SPEED < 40){
    for(int rep = 0; rep < 10; rep++){
      digitalWrite(winner1, 1);
      digitalWrite(winner2, 0);
      delay(150);
      digitalWrite(winner1, 0);
      digitalWrite(winner2, 1);
      delay(150);
    }
    digitalWrite(winner1, 1);
    SPEED = 200;
    while(digitalRead(button) == LOW){
      delay(10);
    }
  }
}
```



see over for void loop();

```
void loop() {
  digitalWrite(winner1,0);
  digitalWrite(winner2,0);
  delay(1000);
  while(digitalRead(button) == LOW){
    digitalWrite(bitOrder[stepCount],1);
    delay(SPEED);
    digitalWrite(bitOrder[stepCount],0);
    if(digitalRead(button) == HIGH){
      if(stepCount == 3 || stepCount == 7){
        SPEED = SPEED - 50;
      }
      else{SPEED = SPEED + 20;}
    }
    stepCount++;
    if(stepCount == 8){stepCount = 0;}
  }
  winning();
}
```

