```
int adrenalineButton = 1;
int meditationButton = 2;
int atrialBlue = 3;
int atrialRed = 4;
int ventricularRed = 5;
int ventricularBlue = 6;

int atrialContraction = 100;
int ventricularContraction = 200;
int ventricularRelaxation = 600;



void setup() {
  // declare the LED pins as outputs
  pinMode(1, INPUT);
  pinMode(2, INPUT);
  for (int i=3; i<7; i++) {
    pinMode(i, OUTPUT);
   }

}

void loop() {

  if (digitalRead(adrenalineButton) == HIGH) {
        atrialContraction = atrialContraction / 2;
        ventricularContraction = ventricularContraction / 2;
        ventricularRelaxation = ventricularRelaxation / 2;
        delay(250); //debounce
         }


  else if (digitalRead(meditationButton) == HIGH) {
        atrialContraction = atrialContraction * 2;
        ventricularContraction = ventricularContraction * 2;
        ventricularRelaxation = ventricularRelaxation * 2;
        delay(250); //debounce
  }
  else {
    //atria contract
```

```
    digitalWrite(3, HIGH);
    digitalWrite(4, HIGH);
    delay(atrialContraction);
    digitalWrite(3, LOW);
    digitalWrite(4, LOW);


    //ventricles contract
    digitalWrite(5, HIGH);
    digitalWrite(6, HIGH);
    delay(ventricularContraction);
    digitalWrite(5, LOW);
    digitalWrite(6, LOW);
    delay(ventricularRelaxation);

  }
}
```