```
int flexPin = 34;
int threshold =3000;
long alertTime = 10000;
long lastTime = 0;
int lastFlexValue = 0;
String state;
String action;
long startTime;

int buzzer=22; // Buzzer Big - 22, Small - Gnd

void setup() {
 Serial.begin(9600);
 pinMode(buzzer,OUTPUT);
 startTime = millis();
}

void loop() {
 int flexValue = analogRead(flexPin);
 long currentTime = millis();

 if (abs(flexValue - lastFlexValue) <threshold) {
  if (currentTime - lastTime > alertTime) {
   state = "same posture";
   action = "alert";
   digitalWrite(buzzer,HIGH);
   delay(2000);
  } else {
```

```
    state = "same posture";
    action = "no action";
    digitalWrite(buzzer,LOW);
   }
  } else {
   state = "posture changed";
   action = "normal";
   lastTime = currentTime;
   lastFlexValue = flexValue;
  }


  Serial.print("#");
  Serial.print(",");
  Serial.print(currentTime);
  Serial.print(",");
  Serial.print(flexValue);
  Serial.print(",");
  Serial.print(state);
  Serial.print(",");
  Serial.print(action);
  Serial.print(",");
  Serial.println("~");

  delay(500);
}
```