

Modify code 3:

To print it into the whole word when it is stored.

```
int i=0;
```

```
int a = 0,a1=1;
```

```
int b = 0,b1=1;
```

```
int c = 0,c1=1;
```

```
int d = 0,d1=1;
```

```
int e = 0,e1=1;
```

```
int x=0;
```

```
int y=0;
```

```
int flag=0;
```

```
char arr[100];
```

```
void setup()
```

```
{
```

```
  pinMode(A0, INPUT);
```

```
  pinMode(A1, INPUT);
```

```
  pinMode(A2, INPUT);
```

```
  pinMode(A3, INPUT);
```

```
  pinMode(A4, INPUT);
```

```
  pinMode(x,INPUT);
```

```
  pinMode(y,INPUT);
```

```
  Serial.begin(9600);
```

```
}
```

```
void loop()
```

```
{delay(2000);
```

```
  a = analogRead(A0); //thumb
```

```
  b = analogRead(A1); //index
```

```
  c = analogRead(A2); //middle
```

```
  d = analogRead(A3); //ring
```

```
  e = analogRead(A4); //little
```

```
  x = analogRead(x);
```

```
  y = analogRead(y);
```

```

bool horizontal (((x >=309)&&(x <=390))&&((y >=270)&&(y <=320))) ;
bool vertical = (((x >=410)&&(x <=462))&&((y >=310)&&(y <=405)));
bool equilibrium =(((x >=317)&&(x <=385))&&((y >=315)&&(y <=390)));

if((a!=a1 && b!=b1 && c !=c1 && d != d1 && e!=e1) || (a!=a1 || b!=b1 || c !=c1 || d != d1 ||
e!=e1)){

    if (a <= 1000 && b >= 1004 && c >= 1006 && d >= 1005 && e >= 1006 && a >= 990 ) {
Serial.print(arr[i]='a');
        i++;

    }
    {
        if (a >= 999 && b <= 994 && c <= 994 && d <=994 && e <= 994 ) {
Serial.print(arr[i]='b');
            i++;
        }

        if(a< 996&&b>= 998&& b<1007 &&c>= 998&&c<1008 && d>=998 &&d<1008 &&e>=998
&&e<1008 )
            { Serial.print(arr[i]='c'); i++; }

        if (a >=998 && a<=1006 && b<=994 && c>=1004&&d >=1000 && e>=1000 && vertical ) {
Serial.print(arr[i]='d');
            i++;
        }
    }
    if (a >= 1008 && b >=1008 && c >=1008 && d >=1008 && e >=1008 ) {
        Serial.print( arr[i]='e');
            i++;
    }
    if (a >= 998 && b >=1000 && c <= 994 && d <= 994&&e<=994 ) {
        Serial.print( arr[i]='f'); i++;
    }
    if (a <= 998 && b <= 994 && c >= 1003 && d >= 1003 && e >= 1004 && a >= 990 &&
horizontal ) {
        Serial.print( arr[i]='g'); i++;
    }
    if (a >= 1000 && b <= 994 && c <= 994 && d >= 1003 && e >= 1002 && horizontal ) {
Serial.print(arr[i]='h'); i++;
    }
    if (a >= 998 && b >= 1006&& c >=1003 && d >= 1003 && e <= 998&& vertical ) {

```

```

Serial.print(arr[i]='i'); i++;
}
if (a >= 998 && b >= 1006&& c >=1003 && d >= 1003 && e <= 998&&!vertical) {
    Serial.print(arr[i]='j'); i++;
}
if (a <= 998 && b <=994 && c <= 994 && d >= 1003 && e >= 1003&& vertical ) {
Serial.print(arr[i]='k'); i++;
}
if (a <=993 && b <= 995 && c >=1000 && d >= 1000 && e >=1000&& vertical ) {
    Serial.print(arr[i]='l'); i++;
}
if (a >= 998&&a<=1006 && b >= 1000 && b<1007&&c >= 1000 &&c<1007&& d >= 1002 &&d
<= 1008 && e >=1008 ) {
    Serial.print(arr[i]='m'); i++;
}
if (a >= 998 &&a <= 1006 && b >= 1000 &&b < 1007 && c >= 1000 && c < 1007 &&d >1008
&& e >=1008 ) {
    Serial.print(arr[i]='n'); i++;
}
if (a >=996 &&b >=998 && b < 1007 && c >= 998 && c < 1008 && d >=998 && d <1008&&e
>=998&& e<1008 && vertical ) {
    Serial.print(arr[i]='o'); i++;
}
if (a <= 1000 && b <= 994 && c <= 998 && d >=1003 && e >=1003 && equilibrium ) {
    Serial.print( arr[i]='p'); i++;
}
if (a <= 994 && b <=994 && c >= 1002 && d >= 1002 && e >=1004&&equilibrium ) {
    Serial.print( arr[i]='q'); i++;
}
if (a >= 998 && b <=993 && c >= 993 && d >=1003 && e >= 1003 &&vertical) {
    Serial.print( arr[i]='r'); i++;
}
if (a >=1004 &&a <1008 && b >= 1006 && c >= 1006 && d >=1006 && e >= 1006 ) {
    Serial.print(arr[i]='s'); i++;
}
if (a >= 993 &&a <= 1000 && b >= 996 && b <= 1002 && c >= 1006 && d >= 1006 && e >=
1006 ) {
    Serial.print( arr[i]='t'); i++;
}
if (a >= 998 && b <= 993 && c < 993 && d >=1003 &&e>=1003 ) {
    Serial.print(arr[i]='u'); i++;
}
if (a >= 998 && b <= 993 && c < 993 && d >=1003 &&e>=1003&& vertical) {
    Serial.print(arr[i]='v'); i++;
}

```

```

}
if (a >= 1000 && b <= 993 && c <= 994&& d <=994 && e >=1003 ) {
    Serial.print(arr[i]='w'); i++;
}
if (a >=998 && b >=993 && b<=1000 && c>=998&&d>=998 && e > 998&& vertical ) {
    Serial.print(arr[i]='x'); i++;
}
if (a <=993 && b >= 1001 && c >=1000 && d >= 1000 && e >=994 ) {
    Serial.print(arr[i]='y'); i++;
}
if (a >=998 && a<=1006 && b<=994 && c>=1004&&d >=1000 && e>=1000&&!vertical ) {
    Serial.print( arr[i]='z'); i++;
}
if (a>990 &&a<=1017&& b>990 &&b<=1002 &&c>990 &&c<=1002 && d>990
&&d<=1002&&e>990 &&e<=1002){
    for(i=0;i<strlen(arr);i++){
        Serial.print(arr[i]);
    }
    Serial.print(" ");}
flag=0;
delay(5000);}
if(flag==0){
a1 = a;
b1 =b;
c1 = c;
d1 = d;
e1 = e;

}

}

```