

define colmun and row pin number //

```
;int c1 = 5  
;int c2 = 4  
;int c3 = 3  
;int c4 = 2  
;int c5 = 1
```

```
;int r1 = 10  
;int r2 = 9  
;int r3 = 8  
;int r4 = 7  
;int r5 = 6
```

```
;int wait = 250
```

initialize pin mode //

```
} ()void setup  
;pinMode (c1,OUTPUT)  
;pinMode (c2,OUTPUT)  
;pinMode (c3,OUTPUT)  
;pinMode (c4,OUTPUT)  
;pinMode (c5,OUTPUT)
```

```
;pinMode (r1,OUTPUT)  
;pinMode (r2,OUTPUT)  
;pinMode (r3,OUTPUT)  
;pinMode (r4,OUTPUT)  
;pinMode (r5,OUTPUT)  
{
```

define loop //

```
}()void loop  
;()smile  
{
```

smile functions //

```
} ()void smile
```

```
c1 + c5 //  
;digitalWrite(c1, HIGH)  
;digitalWrite(c2, LOW)  
;digitalWrite(c3, LOW)  
;digitalWrite(c4, LOW)  
;digitalWrite(c5, HIGH)
```

```
;digitalWrite(r1, HIGH)
;digitalWrite(r2, HIGH)
;digitalWrite(r3, HIGH)
;digitalWrite(r4, LOW)
;digitalWrite(r5, HIGH)
```

```
;delay(5)
```

```
define c2 + c4 //
;digitalWrite(c1, LOW)
;digitalWrite(c2, HIGH)
;digitalWrite(c3, LOW)
;digitalWrite(c4, HIGH)
;digitalWrite(c5, LOW)
```

```
;digitalWrite(r1, LOW)
;digitalWrite(r2, LOW)
;digitalWrite(r3, HIGH)
;digitalWrite(r4, HIGH)
;digitalWrite(r5, LOW)
```

```
;delay (5)
```

```
c3//
;digitalWrite(c1, LOW)
;digitalWrite(c2, LOW)
;digitalWrite(c3, HIGH)
;digitalWrite(c4, LOW)
;digitalWrite(c5, LOW)
```

```
;digitalWrite(r1, HIGH)
;digitalWrite(r2, HIGH)
;digitalWrite(r3, LOW)
;digitalWrite(r4, HIGH)
;digitalWrite(r5, LOW)
```

```
;delay(5)
```

```
{
```