

```
int a = 2;  
int b = 3;  
int c = 4;  
int d = 5;  
int e = 6;  
int f = 8;  
int g = 9;
```

```
void setup() {  
    pinMode(a, OUTPUT); //A  
    pinMode(b, OUTPUT); //B  
    pinMode(c, OUTPUT); //C  
    pinMode(d, OUTPUT); //D  
    pinMode(e, OUTPUT); //E  
    pinMode(f, OUTPUT); //F  
    pinMode(g, OUTPUT); //G  
}
```

```
void displayDigit(int digit)  
{  
    //Conditions for displaying segment a  
    if(digit!=1 && digit != 4)  
        digitalWrite(a,HIGH);  
  
    //Conditions for displaying segment b  
    if(digit != 5 && digit != 6)  
        digitalWrite(b,HIGH);  
  
    //Conditions for displaying segment c  
    if(digit !=2)  
        digitalWrite(c,HIGH);
```

```
//Conditions for displaying segment d  
if(digit != 1 && digit !=4 && digit !=7)  
    digitalWrite(d,HIGH);
```

```
//Conditions for displaying segment e  
if(digit == 2 || digit ==6 || digit == 8 || digit==0)  
digitalWrite(e,HIGH);
```

```
//Conditions for displaying segment f  
if(digit != 1 && digit !=2 && digit!=3 && digit !=7)  
digitalWrite(f,HIGH);  
if (digit!=0 && digit!=1 && digit !=7)  
digitalWrite(g,HIGH);
```

```
}
```

```
void turnOff()
```

```
{
```

```
digitalWrite(a,LOW);  
digitalWrite(b,LOW);  
digitalWrite(c,LOW);  
digitalWrite(d,LOW);  
digitalWrite(e,LOW);  
digitalWrite(f,LOW);  
digitalWrite(g,LOW);
```

```
}
```

```
void loop() {  
for(int i=0;i<10;i++)  
{  
displayDigit(i);  
delay(1000);  
turnOff();  
}  
}
```