Exp 3

```
#define segA 6//connecting segment A to PIN6
#define segB 7// connecting segment B to PIN7
#define segC 8// connecting segment C to PIN8
#define segD 9// connecting segment D to PIN9
#define segE 10// connecting segment E to PIN10
#define segF 11// connecting segment F to PIN11
#define segG 12// connecting segment F to PIN12
int COUNT=0;//count integer for 0-9 increment
void setup() {
  pinMode(6, OUTPUT);
  pinMode(7, OUTPUT);
  pinMode(8, OUTPUT);
  pinMode(9, OUTPUT);
  pinMode(10, OUTPUT);
  pinMode(11, OUTPUT);
  pinMode(12, OUTPUT);
}

void loop() {
  switch (COUNT) {
  case 0://when count value is zero show"0" on disp
    digitalWrite(segA, HIGH);
    digitalWrite(segB, HIGH);
    digitalWrite(segC, HIGH);
    digitalWrite(segD, HIGH);
    digitalWrite(segE, HIGH);
    digitalWrite(segF, HIGH);
    digitalWrite(segG, LOW);
        break;
  case 1:// when count value is 1 show"1" on disp
    digitalWrite(segA, LOW);
    digitalWrite(segB, HIGH);
    digitalWrite(segC, HIGH);
    digitalWrite(segD, LOW);
    digitalWrite(segE, LOW);
    digitalWrite(segF, LOW);
    digitalWrite(segG, LOW);
  break;
  case 2:// when count value is 2 show"2" on disp
    digitalWrite(segA, HIGH);
    digitalWrite(segB, HIGH);
```

```
  digitalWrite(segC, LOW);
  digitalWrite(segD, HIGH);
  digitalWrite(segE, HIGH);
  digitalWrite(segF, LOW);
  digitalWrite(segG, HIGH);
  break;
case 3:// when count value is 3 show"3" on disp
  digitalWrite(segA, HIGH);
  digitalWrite(segB, HIGH);
  digitalWrite(segC, HIGH);
  digitalWrite(segD, HIGH);
  digitalWrite(segE, LOW);
  digitalWrite(segF, LOW);
  digitalWrite(segG, HIGH);
      break;

case 4:// when count value is 4 show"4" on disp
  digitalWrite(segA, LOW);
  digitalWrite(segB, HIGH);
  digitalWrite(segC, HIGH);
  digitalWrite(segD, LOW);
  digitalWrite(segE, LOW);
  digitalWrite(segF, HIGH);
  digitalWrite(segG, HIGH);
  break;

case 5:// when count value is 5 show"5" on disp
  digitalWrite(segA, HIGH);
  digitalWrite(segB, LOW);
  digitalWrite(segC, HIGH);
  digitalWrite(segD, HIGH);
  digitalWrite(segE, LOW);
  digitalWrite(segF, HIGH);
  digitalWrite(segG, HIGH);
  break;
case 6:// when count value is 6 show"6" on disp
  digitalWrite(segA, HIGH);
  digitalWrite(segB, LOW);
  digitalWrite(segC, HIGH);
  digitalWrite(segD, HIGH);
  digitalWrite(segE, HIGH);
  digitalWrite(segF, HIGH);
  digitalWrite(segG, HIGH);
  break;
```

```cpp
   case 7:// when count value is 7 show"7" on disp
    digitalWrite(segA, HIGH);
    digitalWrite(segB, HIGH);
    digitalWrite(segC, HIGH);
    digitalWrite(segD, LOW);
    digitalWrite(segE, LOW);
    digitalWrite(segF, LOW);
    digitalWrite(segG, LOW);
    break;
   case 8:// when count value is 8 show"8" on disp
    digitalWrite(segA, HIGH);
    digitalWrite(segB, HIGH);
    digitalWrite(segC, HIGH);
    digitalWrite(segD, HIGH);
    digitalWrite(segE, HIGH);
    digitalWrite(segF, HIGH);
    digitalWrite(segG, HIGH);
    break;
   case 9:// when count value is 9 show"9" on disp
    digitalWrite(segA, HIGH);
    digitalWrite(segB, HIGH);
    digitalWrite(segC, HIGH);
    digitalWrite(segD, HIGH);
    digitalWrite(segE, LOW);
    digitalWrite(segF, HIGH);
    digitalWrite(segG, HIGH);
    break;
  }
  if (COUNT<10)
       {
               COUNT++;
               delay(1000);///increment count integer for every second
       }
       if (COUNT==10)
       {
               COUNT=0;// if count integer value is equal to 10, reset it to zero.
               delay(1000);
       }
}
```