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Experiment No. : 06

Statement : Design a 4-bit counter.

Date of Exp. : xx/xx/xxxx

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**Code Snippet**

int led[]={3,4,5,6};

int loopLed=4;

int switchPin = 2;

int counter=0;

void setup(){

pinMode(switchPin,INPUT\_PULLUP);

for(int i=0;i<=loopLed;i++){

pinMode(led[i],OUTPUT);

}

}

void loop(){

if(digitalRead(switchPin)==LOW){

delay(100);

while(digitalRead(switchPin)==LOW){}

incrementCounter();

updateLeds();

}

}

void incrementCounter(){

counter++;

if(counter==16){

counter=0;

}

}

void updateLeds(){

for(int i=0;i<loopLed;i++){

int bitValue=bitRead(counter,i);

digitalWrite(led[i],bitValue);

}

}



