**Practical 10**

**AIM:** Directional Control of the DC motor using Arduino.

const int inputPin=1;

const int blue=3;

const int red=4;

const int motorPin1=5,motorPin2=6;

int dir=LOW;

int prevState=0,currentState=0;

void setup()

{

// put your setup code here, to run once:

pinMode(inputPin,INPUT);

pinMode(motorPin1,OUTPUT);

pinMode(motorPin2,OUTPUT);

pinMode(blue,OUTPUT);

pinMode(red,OUTPUT);

}

void loop()

{

// put your main code here, to run repeatedly:

currentState=digitalRead(inputPin);

if(currentState!=prevState)

{

if(currentState==HIGH)

{ dir=!dir;

}

}

prevState=currentState;

if(dir==HIGH)

{

digitalWrite(motorPin1,HIGH);

digitalWrite(motorPin2,HIGH);

digitalWrite(blue,LOW);

digitalWrite(red,HIGH);

}

}

**OUTPUT:**

