**Name: Shubham Vilas Malve**

**Class: BE-II**

**Roll No.: E42067**

**CODE:**

**Interfacing of DC Motor with Arduino:**

int motorPin = 9;

void setup() {

pinMode(motorPin,OUTPUT);

Serial.begin(9600);

While(! Serial);

Serial.println(“Speed 0 to 255”);

}

void loop() {

if(Serial.available()) {  
int speed = Serial.parseInt();

if(speed >= 0 && speed <= 255) {

analogWrite(motorPin, speed);

}

}

}

**CODE:**

**Interfacing of DC Motor with RPi:**

Import RPi.GPIO as GPIO

Import time

EN1=25

IN1=26

IN2=27

GPIO.setmode(GPIO.BCM)

GPIO.setup(EN1,GPIO.OUT) ##Declaring as EN1 output pin

GPIO.setup(IN1,GPIO.OUT) ##Declaring as IN1 output pin

GPIO.setup(IN2,GPIO.OUT) ##Declaring as IN2 output pin

#clear GPIOs

def Destroy():

GPIO.output(25,False)

GPIO.output(26,False)

GPIO.output(27,False)

GPIO.cleanup()

def Clockwise():

GPIO.output(25,True)

GPIO.output(26,True)

GPIO.output(27,False)

def AntiClockwise():

GPIO.output(25,True)

GPIO.output(26,False)

GPIO.output(27,True)

def Stop():

GPIO.output(25,False)

GPIO.output(26,False)

GPIO.output(27,False)

if\_\_name\_\_==‘\_\_main\_\_’: #Program start from here

try:

while True:

Clockwise()

time.sleep(2)

Stop()

time.sleep(1)

AntiClockwise()

time.sleep(2)

Stop()

time.sleep(1)

#If keyboard Interrupt is pressed

except KeyboardInterrupt:

destroy()

int DCMOTOR=13;

int delayT=1000;

void setup() {

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

digitalWrite(DCMOTOR,HIGH);

delay(delayT);

digitalWrite(LEDpin,LOW);

delay(delayT);

}