**BLE HM-10 Controlled Robot**

#define LED 13

char data = 0;

#define IN1 8

#define IN2 9

#define IN3 10

#define IN4 11

void setup()

{

pinMode(LED, OUTPUT);

pinMode(IN1, OUTPUT);

pinMode(IN2, OUTPUT);

pinMode(IN3, OUTPUT);

pinMode(IN4, OUTPUT);

Serial.begin(9600);

Serial.println("System is started.....");

}

void loop()

{

if(Serial.available() > 0)

{

data = Serial.read();

Serial.println(data);

if(data == 'a')

{

digitalWrite(LED, LOW);

forward();

}

else if(data =='C')

{

digitalWrite(LED, LOW);

back();

}

else if(data =='h')

{

stop();

digitalWrite(LED, HIGH);

}

else if(data =='d')

{

digitalWrite(LED, LOW);

left();

}

else if(data =='b')

{

digitalWrite(LED, LOW);

right();

}

}

}

void forward()

{

digitalWrite(IN1, HIGH);//RIGHT MOTOR

digitalWrite(IN2, LOW);

digitalWrite(IN3, HIGH); // LEFT MOTOR

digitalWrite(IN4, LOW);

}

void back()

{

digitalWrite(IN1, LOW);//RIGHT MOTOR

digitalWrite(IN2, HIGH);

digitalWrite(IN3, LOW); // LEFT MOTOR

digitalWrite(IN4, HIGH);

}

void stop()

{

digitalWrite(IN1, LOW);//RIGHT MOTOR

digitalWrite(IN2, LOW);

digitalWrite(IN3, LOW); // LEFT MOTOR

digitalWrite(IN4, LOW);

}

void left()

{

digitalWrite(IN1, HIGH);//RIGHT MOTOR

digitalWrite(IN2, LOW);

digitalWrite(IN3, LOW); // LEFT MOTOR

digitalWrite(IN4, LOW);

}

void right()

{

digitalWrite(IN1, LOW);//RIGHT MOTOR

digitalWrite(IN2, LOW);

digitalWrite(IN3, HIGH); // LEFT MOTOR

digitalWrite(IN4, LOW);

}