

```
// start

int m1a = 9;

int m1b = 10;

int m2a = 11;

int m2b = 12;

char val;

void setup()
{
  pinMode(m1a, OUTPUT);
  pinMode(m1b, OUTPUT);
  pinMode(m2a, OUTPUT);
  pinMode(m2b, OUTPUT);
  Serial.begin(9600);
}

void loop()
{
  while(Serial.available() > 0)
  {
    val = Serial.read();
    Serial.println(val);
  }

  if(val == 'F')    // forward
  {
    digitalWrite(m1a, HIGH);
    digitalWrite(m1b, LOW);
    digitalWrite(m2a, HIGH);
    digitalWrite(m2b, LOW);
  }

  else if(val == 'B')    // backward
  {
```

```
digitalWrite(m1a, LOW);
digitalWrite(m1b, HIGH);
digitalWrite(m2a, LOW);
digitalWrite(m2b, HIGH);
}
else if(val == 'L')    // left
{
    digitalWrite(m1a, LOW);
    digitalWrite(m1b, LOW);
    digitalWrite(m2a, HIGH);
    digitalWrite(m2b, LOW);
}
else if(val == 'R')    // right
{
    digitalWrite(m1a, HIGH);
    digitalWrite(m1b, LOW);
    digitalWrite(m2a, LOW);
    digitalWrite(m2b, LOW);
}
else if(val == 'I')    // forward right
{
    digitalWrite(m1a, HIGH);
    digitalWrite(m1b, LOW);
    digitalWrite(m2a, LOW);
    digitalWrite(m2b, LOW);
}
else if(val == 'J')    // backwad right
{
    digitalWrite(m1a, LOW);
    digitalWrite(m1b, HIGH);
    digitalWrite(m2a, LOW);
```

```
digitalWrite(m2b, LOW);  
}  
else if(val == 'G') // fardward left  
{  
    digitalWrite(m1a, LOW);  
    digitalWrite(m1b, LOW);  
    digitalWrite(m2a, HIGH);  
    digitalWrite(m2b, LOW);  
}  
else if(val == 'H') //backward left  
{  
    digitalWrite(m1a, LOW);  
    digitalWrite(m1b, LOW);  
    digitalWrite(m2a, LOW);  
    digitalWrite(m2b, HIGH);  
}  
else if(val == 'S') // stop  
{  
    digitalWrite(m1a, LOW);  
    digitalWrite(m1b, LOW);  
    digitalWrite(m2a, LOW);  
    digitalWrite(m2b, LOW);  
}  
}
```