

CODE

```
int IN1 = 13;

int IN2 = 12;

int IN3 = 11;

int IN4 = 10;

char val;

void setup()

{

  pinMode(IN1, OUTPUT);

  pinMode(IN2, OUTPUT);

  pinMode(IN3, OUTPUT);

  pinMode(IN4, OUTPUT);

  Serial.begin(9600);

}

void loop()

{

  while (Serial.available() > 0)

  {

    val = Serial.read();

    Serial.println(val);

  }

  if( val == 'F') // Forward

  {

    digitalWrite(IN1, HIGH);
```

```
digitalWrite(IN2, LOW);  
digitalWrite(IN3, HIGH);  
digitalWrite(IN4, LOW);  
}  
  
else if(val == 'B') // Backward  
{  
    digitalWrite(IN1, LOW);  
    digitalWrite(IN2, HIGH);  
    digitalWrite(IN3, LOW);  
    digitalWrite(IN4, HIGH);  
}  
  
  
else if(val == 'L') //Left  
{  
    digitalWrite(IN1, LOW);  
    digitalWrite(IN2, LOW);  
    digitalWrite(IN3, HIGH);  
    digitalWrite(IN4, LOW);  
}  
  
else if(val == 'R') //Right  
{  
    digitalWrite(IN1, HIGH);  
    digitalWrite(IN2, LOW);  
    digitalWrite(IN3, LOW);  
    digitalWrite(IN4, LOW);
```

```
}
```

```
else if(val == 'S') //Stop
```

```
{
```

```
digitalWrite(IN1, LOW);
```

```
digitalWrite(IN2, LOW);
```

```
digitalWrite(IN3, LOW);
```

```
digitalWrite(IN4, LOW);
```

```
}
```

```
else if(val == 'I') //Forward Right
```

```
{
```

```
digitalWrite(IN1, HIGH);
```

```
digitalWrite(IN2, LOW);
```

```
digitalWrite(IN3, LOW);
```

```
digitalWrite(IN4, LOW);
```

```
}
```

```
else if(val == 'J') //Backward Right
```

```
{
```

```
digitalWrite(IN1, LOW);
```

```
digitalWrite(IN2, HIGH);
```

```
digitalWrite(IN3, LOW);
```

```
digitalWrite(IN4, LOW);
```

```
}
```

```
else if(val == 'G') //Forward Left
```

```
{
```

```
digitalWrite(IN1, LOW);  
digitalWrite(IN2, LOW);  
digitalWrite(IN3, HIGH);  
digitalWrite(IN4, LOW);  
}  
else if(val == 'H') //Backward Left  
{  
digitalWrite(IN1, LOW);  
digitalWrite(IN2, LOW);  
digitalWrite(IN3, LOW);  
digitalWrite(IN4, HIGH);  
}  
}
```