

```
`#include <SoftwareSerial.h>
```

```
Servo myservo;
```

```
const int mot11=2 ;
```

```
const int mot12=3;
```

```
const int mot21=4;//rotation motor connections
```

```
const int mot22=5;
```

```
const int mot31=6;
```

```
const int mot32=7;
```

```
const int mot41=11;
```

```
const int mot42=12;
```

```
const int relay =10;
```

```
SoftwareSerial portOne(8,9);
```

```
int pos = 0;
```

```
char byt;
```

```
void setup()
```

```
{
```

```
  pinMode(mot11,OUTPUT);
```

```
  pinMode(mot12,OUTPUT);
```

```
  pinMode(mot21,OUTPUT);
```

```
  pinMode(mot22,OUTPUT);
```

```
  pinMode(mot31,OUTPUT);
```

```
  pinMode(mot32,OUTPUT);
```

```
  pinMode(mot41,OUTPUT);
```

```
  pinMode(mot42,OUTPUT);
```

```
    pinMode(relay,OUTPUT);
```

```
    digitalWrite(relay,HIGH);
```

```
Serial.begin(9600);  
portOne.begin(9600);
```

```
}
```

```
void loop()  
{  
  while(1)  
  {  
    if(portOne.available()>0)  
    {  
      char byt= portOne.read();  
      Serial.write(byt);  
      switch(byt)  
      {  
        case '1':  
        {  
          digitalWrite(mot11,HIGH);  
          digitalWrite(mot12, LOW);  
          digitalWrite(mot21, HIGH);  
          digitalWrite(mot22, LOW);  
          Serial.println("forward");  
          delay(2000);  
          break;  
        }  
        case '2':  
        {  
          digitalWrite(mot11,LOW);  
          digitalWrite(mot12, HIGH);
```

```
digitalWrite(mot21, LOW);
digitalWrite(mot22, HIGH);
  Serial.println("reverse");
  delay(2000);
  break;
}
case '3':
{
digitalWrite(mot11,LOW);
digitalWrite(mot12, HIGH);
digitalWrite(mot21, HIGH);
digitalWrite(mot22, LOW);
Serial.println("LEFT");
delay(2000);
break;
}
case '4':
{

digitalWrite(mot11,HIGH);
digitalWrite(mot12, LOW);
digitalWrite(mot21, LOW);
digitalWrite(mot22, HIGH);
  Serial.println("RIGHT");
  delay(2000);
break;
}
case '5':
{
```

```
digitalWrite(mot11,LOW);  
digitalWrite(mot12, LOW);  
digitalWrite(mot21, LOW);  
digitalWrite(mot22, LOW);  
    Serial.println("STOP");  
    delay(2000);
```

```
    break;  
}  
case '6':  
{  
digitalWrite(relay,LOW);  
Serial.println("PUMP ON");  
    break;  
}  
case '7':  
{  
digitalWrite(relay,HIGH);  
Serial.println("PUMP OFF");  
    break;  
}  
case '8':  
{  
digitalWrite(mot31,HIGH);  
digitalWrite(mot32,LOW);  
Serial.println("TOP ON");  
    break;  
}  
case '9':
```

```
{  
    digitalWrite(mot31,LOW);  
digitalWrite(mot32,HIGH);  
    Serial.println("TOP OFF");  
    break;  
}  
case '0':  
{  
    digitalWrite(mot31,LOW);  
digitalWrite(mot32,LOW);  
    Serial.println("TOP OFF");  
    break;  
}  
case 'a':  
{  
    digitalWrite(mot41,LOW);  
digitalWrite(mot42,HIGH);  
delay(1000);  
    digitalWrite(mot41,HIGH);  
digitalWrite(mot42,LOW);  
delay(1000);  
    digitalWrite(mot41,LOW);  
digitalWrite(mot42,LOW);  
delay(1000);  
    break;  
}  
  
default:  
{
```

```

        break;

    }

}

}

}

}

/*void checkfire() {
    st=digitalRead(SensorPin);
    if(st==LOW)
    {
        portOne.println("fire occurred");
        Serial.println("fire occurred");
        digitalWrite(mot11,LOW);
        digitalWrite(mot12, LOW);
        digitalWrite(mot21, LOW);
        digitalWrite(mot22, LOW);
        digitalWrite(pump,LOW);
        delay(2000);
        digitalWrite(pump,HIGH);
        delay(2000);
    }
}*/

```