

```
'#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 occured");
        Serial.println("fire occured");
        digitalWrite(mot11,LOW);
        digitalWrite(mot12, LOW);
        digitalWrite(mot21, LOW);
        digitalWrite(mot22, LOW);
        digitalWrite(pump,LOW);
        delay(2000);
        digitalWrite(pump,HIGH);
        delay(2000);
    }
}*/
```