Fire-Ex robot:

```
#include <Servo.h> //include servo.h library
Servo myservo;
int pos = 0;
boolean fire = false;
#define Left 9 // left sensor
#define Right 10 // right sensor
#define Forward 8 //front sensor
#define LM1 2 // left motor
#define LM2 3 // left motor
#define RM1 4 // right motor
#define RM2 5 // right motor
#define pump 6
void setup()
{
pinMode(Left, INPUT);
pinMode(Right, INPUT);
pinMode(Forward, INPUT);
pinMode(LM1, OUTPUT);
pinMode(LM2, OUTPUT);
pinMode(RM1, OUTPUT);
pinMode(RM2, OUTPUT);
pinMode(pump, OUTPUT);
myservo.attach(11);
myservo.write(90);
}
void put_off_fire()
{
delay (500);
digitalWrite(LM1, HIGH);
digitalWrite(LM2, HIGH);
```

```
digitalWrite(RM1, HIGH);
digitalWrite(RM2, HIGH);
digitalWrite(pump, HIGH);
delay(500);
for (pos = 50; pos <= 130; pos += 1) {
myservo.write(pos);
delay(10);
}
for (pos = 130; pos >= 50; pos -= 1) {
myservo.write(pos);
delay(10);
}
digitalWrite(pump,LOW);
myservo.write(90);
fire=false;
}
void loop()
{
myservo.write(90); //Sweep_Servo();
if (digitalRead(Left) ==1 && digitalRead(Right)==1 && digitalRead(Forward) ==1)
{
digitalWrite(LM1, HIGH);
digitalWrite(LM2, HIGH);
digitalWrite(RM1, HIGH);
digitalWrite(RM2, HIGH);
}
else if (digitalRead(Forward) ==0)
{
digitalWrite(LM1, HIGH);
digitalWrite(LM2, LOW);
digitalWrite(RM1, HIGH);
```

```
digitalWrite(RM2, LOW);
fire = true;
}
else if (digitalRead(Left) ==0)
{
digitalWrite(LM1, HIGH);
digitalWrite(LM2, LOW);
digitalWrite(RM1, HIGH);
digitalWrite(RM2, HIGH);
}
else if (digitalRead(Right) ==0)
{
digitalWrite(LM1, HIGH);
digitalWrite(LM2, HIGH);
digitalWrite(RM1, HIGH);
digitalWrite(RM2, LOW);
}
delay(300);//change this value to increase the distance
```

```
while (fire == true)
{
put_off_fire();
}
}
```