Human Following Robot Used Code:

```
// You have to Install the AFMotor and NewPing library Before Uploading the sketch//
// To install the libraries ( first download the AF Motor driver, NewPing and Servo Library zip file

#include<NewPing.h>
#include<Servo.h>
#include<AFMotor.h>
#define RIGHT A2
#define LEFT A3
#define TRIGGER_PIN A1
#define ECHO_PIN A0
#define MAX_DISTANCE 200


NewPing sonar(TRIGGER_PIN, ECHO_PIN, MAX_DISTANCE);


AF_DCMotor Motor1(1,MOTOR12_1KHZ);
AF_DCMotor Motor2(2,MOTOR12_1KHZ);
AF_DCMotor Motor3(3,MOTOR34_1KHZ);
AF_DCMotor Motor4(4,MOTOR34_1KHZ);

Servo myservo;

int pos =0;
```

```
void setup() {
  // put your setup code here, to run once:
  Serial.begin(9600);
myservo.attach(10);
{
for(pos = 90; pos <= 180; pos += 1){
  myservo.write(pos);
  delay(15);
} for(pos = 180; pos >= 0; pos-= 1) {
  myservo.write(pos);
  delay(15);
}for(pos = 0; pos<=90; pos += 1) {
  myservo.write(pos);
  delay(15);
}
}
pinMode(RIGHT, INPUT);
pinMode(LEFT, INPUT);


}

void loop() {
  // put your main code here, to run repeatedly:

  delay(50);
 unsigned int distance = sonar.ping_cm();
```

```
Serial.print("distance");
Serial.println(distance);



int Right_Value = digitalRead(RIGHT);
int Left_Value = digitalRead(LEFT);

Serial.print("RIGHT");
Serial.println(Right_Value);
Serial.print("LEFT");
Serial.println(Left_Value);

if((Right_Value==1) && (distance>=10 && distance<=30)&&(Left_Value==1)){
  Motor1.setSpeed(160);
  Motor1.run(BACKWARD);
  Motor2.setSpeed(160);
  Motor2.run(BACKWARD);
  Motor3.setSpeed(160);
  Motor3.run(BACKWARD);
  Motor4.setSpeed(160);
  Motor4.run(BACKWARD);
}else if((Right_Value==0) && (Left_Value==1)) {
  Motor1.setSpeed(250);
  Motor1.run(FORWARD);
  Motor2.setSpeed(250);
  Motor2.run(FORWARD);
```

```
  Motor3.setSpeed(150);
  Motor3.run(BACKWARD);
  Motor4.setSpeed(150);
  Motor4.run(BACKWARD);
 }else if((Right_Value==1)&&(Left_Value==0)) {
  Motor1.setSpeed(150);
  Motor1.run(BACKWARD);
  Motor2.setSpeed(150);
  Motor2.run(BACKWARD);
  Motor3.setSpeed(250);
  Motor3.run(FORWARD);
  Motor4.setSpeed(250);
  Motor4.run(FORWARD);
 }else if((Right_Value==1)&&(Left_Value==1)) {
  Motor1.setSpeed(0);
  Motor1.run(RELEASE);
  Motor2.setSpeed(0);
  Motor2.run(RELEASE);
  Motor3.setSpeed(0);
  Motor3.run(RELEASE);
  Motor4.setSpeed(0);
  Motor4.run(RELEASE);
 }else if(distance > 1 && distance < 10) {
  Motor1.setSpeed(0);
  Motor1.run(RELEASE);
  Motor2.setSpeed(0);
```

```
 Motor2.run(RELEASE);
 Motor3.setSpeed(0);
 Motor3.run(RELEASE);
 Motor4.setSpeed(0);
 Motor4.run(RELEASE);
 }
}
```