

Line Follow (basic)

This is a basic program that has the robot follow a black line on a white floor. If the robot sees the white floor, it will turn right, and if it sees the black line, it will turn left. This constant turning left and right keeps the robot following the left-hand edge of the black line. The robot will keep doing this until its owner stops it or it runs out of battery.

You will need to set up a light sensor named “LightSensor” and two motors named “LeftMotor” and “RightMotor”

The **while** keyword starts a loop. The loop will run over and over again as long as the condition in the parenthesis is true. Since true is always true, this loop will run forever (or until someone tells the robot to stop)

The **if** keyword runs a block of code if the condition in the parenthesis is true. The robot reads the value from the LightSensor. If the value is greater than 45, that means the robot is seeing the white floor. Less than 45 means the robot is on the black line.

true (the LightSensor value is over 45), this block of code runs. Running the RightMotor at 50% makes the robot turn right.

The **else** keyword works together with the **if** keyword. When the **if** condition is false, the **else** block of code runs.

The robot waits 10 milliseconds before starting the whole process over again.

```
task main()  
{  
  while(true)  
  {  
    if(SensorValue[LightSensor] > 45)  
    {  
      motor[LeftMotor] = 100;  
      motor[RightMotor] = 50;  
    }  
    else  
    {  
      motor[LeftMotor] = 50;  
      motor[RightMotor] = 100;  
    }  
    wait1Msec(10);  
  }  
}
```

The **while** section ends here

The **task main** section ends here