

# WORKING AND PROGRAMING

## WORKING OF LINE FOLLOWER

Here in this project we are using two IR sensor modules namely left sensor and right sensor.

When both left and right sensor senses white then robot move forward. If left sensor comes on black line then robot turn left side. If right sensor comes on black line then robot turn right side.

However if both the sensors are on the black line the robot continues to move forward until one of the sensors detect white and the robot turns in the opposite direction thus coming back on line. This allows the robot to follow a line of any width.

To turn in a direction, the motor in that direction starts turning backwards while the opposite motor continues forward.

```
void loop() {  
  LSVAL= analogRead(LS);  
  RSVAL= analogRead(RS);  
  
  if(LSVAL<threshold && RSVAL<threshold) {  
    motor1.run(FORWARD);  
    motor2.run(FORWARD);  
  }  
  
  if(LSVAL>threshold && RSVAL>threshold) {  
    motor1.run(FORWARD);  
    motor2.run(FORWARD);  
  }  
  
  if(LSVAL>threshold && RSVAL<threshold) {  
    motor1.run(FORWARD);  
    motor2.run(BACKWARD);  
  }  
  
  if(LSVAL<threshold && RSVAL>threshold) {  
    motor1.run(BACKWARD);  
    motor2.run(FORWARD);  
  }  
}
```

