



ARTIFICIAL INTELLIGENCE AND PROGRAMMING ROBOT

PRACTICAL NO 5

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Practical No. 5

Aim:

Write a program to create a robot that does a circle using 2 motors.

Theory:

Motors are one of the primary mechanisms by which robots move. Some motors can be attached to wheels that drive a robot around. Other motors might cause joints in a robot limb to move. Yet others might move the control surfaces of a robotic airplane or submarine. A robot might have many different kinds of effectors to perform specific tasks, but many of these effectors are being moved around by motors.

To make a robot go in circle using two motors we set one of the motors at lower speed than the other.

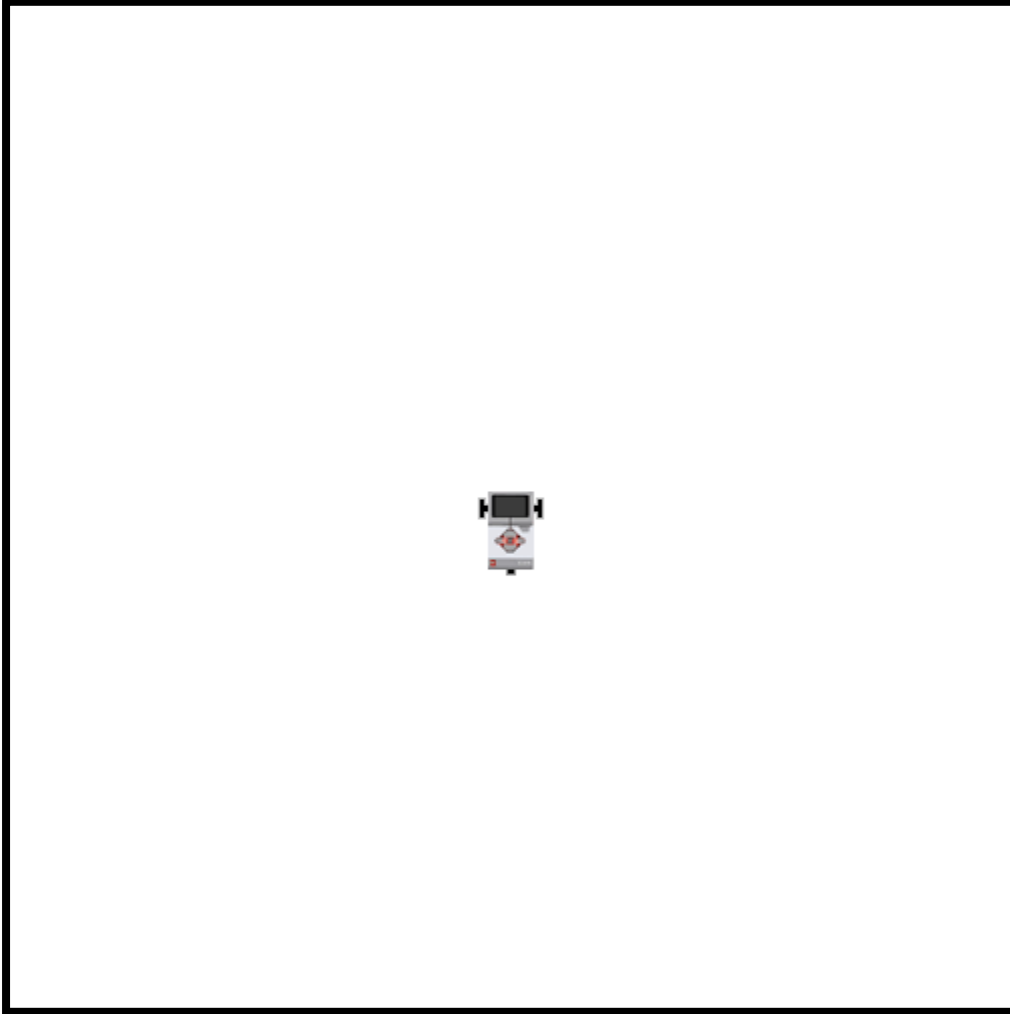
Code:

```
package circlewithmotor;
/**
 *
 * @author STreK
 */
import ch.aplu.robotsim.*;
public class CircleWithMotor {
    public CircleWithMotor(){

        LegoRobot robot = new LegoRobot();
        Motor mot1 = new Motor(MotorPort.A);
        Motor mot2 = new Motor(MotorPort.B);
        robot.addPart(mot1);
        robot.addPart(mot2);
        try{
            Thread.sleep(5000);
        } catch (InterruptedException ex) {
            ex.printStackTrace();
        }
        while(true){
            mot1.forward();
            mot1.setSpeed(100);
            mot2.forward();
            mot2.setSpeed(50);
        }
    }

    public static void main(String[] args) {
```

```
    new CircleWithMotor();  
}  
}
```

Output:**Conclusion:**

We successfully used two motors one with lower speed then other to make the Lego robot go in a circle.