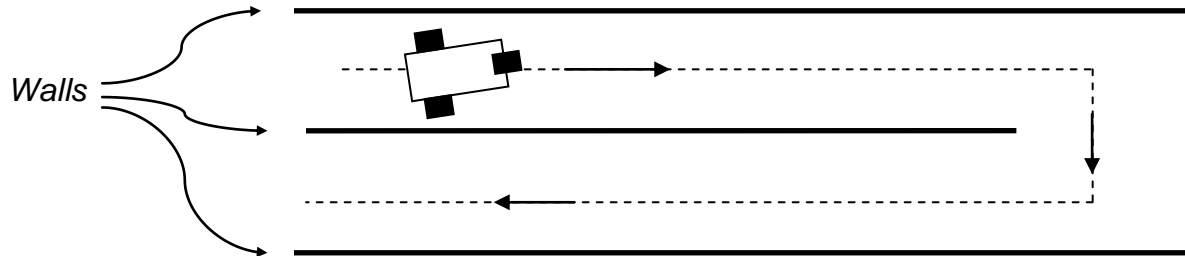


**EP486 Microcontroller Applications**  
**Final Exam Question**  
**University of Gaziantep, Department of Engineering of Physics**  
**(Deadline: 11/01/2014)**

By using an Arduino board, design and construct a robot car that follows a predefined road whose top view is given below as fast as possible.



**Requirements:**

- Just start and stop of the robot must be controlled remotely.
- Direction of the robot must be automated by an ultrasonic sensor.
- You can use any type and number of motors.
- You should take a video shoot (max 1 min) describing how it works.  
Then, upload the video to YouTube and send the link by an e-mail to [bingul\\_at\\_gantep.edu.tr](mailto:bingul_at_gantep.edu.tr).

**Marking:**

- If the robot get to finish: 50
- If remote control works: 10
- Video shoot: 5
- Speed of the robot:  $65 - T$  (where  $T$  is the time in seconds)