

HOMEWORK ASSIGNMENT #0

1 Introduction

1.1 Submission

Submit a **folder** that is only containing your **Java** source files (**ClearAllBeepersInLine.java**) in Black Board.

Please use the following naming convention for the submitted folders:

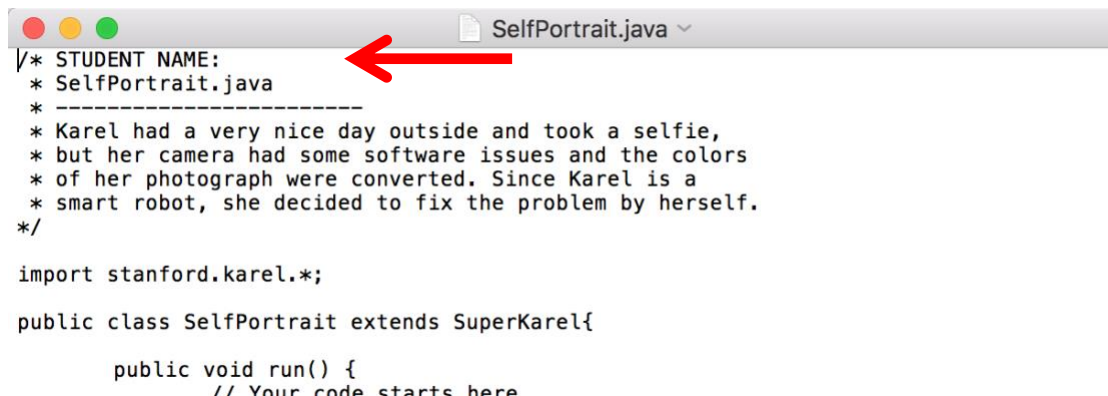
PSLetter_CourseCode_Surname_HW Number_Semester

Example folder names are:

- **PSD_COMP130_Yildirim_HW0_F18**
- **PSC_COMP131_Aydin_HW0_F18**

Additional notes:

- Using the naming convention properly is important, failing to do so may be **penalized**.
- **Do not** use Turkish characters when naming files or folders.
- Submissions with unidentifiable names will be **disregarded** completely. (ex. "homework1", "project" etc.)
- Please write **your name** into the Java source file where it is asked for.



```
/* STUDENT NAME:
 * SelfPortrait.java
 * -----
 * Karel had a very nice day outside and took a selfie,
 * but her camera had some software issues and the colors
 * of her photograph were converted. Since Karel is a
 * smart robot, she decided to fix the problem by herself.
 */

import stanford.karel.*;

public class SelfPortrait extends SuperKarel{

    public void run() {
        // Your code starts here
    }
}
```

1.2 Academic Honesty

Koc University's Statement on [Academic Honesty](#) holds for all the homeworks given in this course. Failing to comply with the statement will be penalized accordingly. If you are unsure whether your action violates the code of conduct, please consult with your instructor.

1.3 Further Questions

For further questions **about the project** you may contact **Ayca Tuzmen** at [atuzmen@ku.edu.tr]. Note that it may take up to 24 hours before you receive a response so please ask your questions **before** it is too late. No questions will be answered when there is **less than two days** left for the submission.

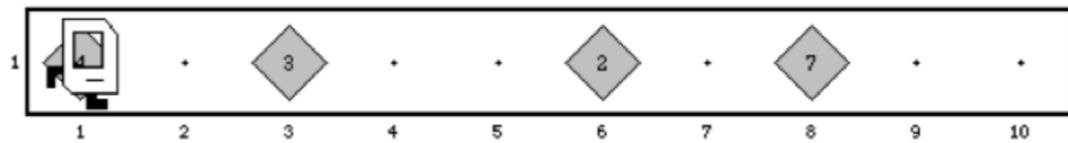
2 Project Tasks

This is a simple homework to demonstrate the homework policies and show you what to expect from the homeworks in future. As a result, a very simple task will be given to you.

2.1 Collecting Beepers

Karel needs to collect all the beepers in a straight line and return back to its **initial** position. You may solve this question only for the given world file <**ClearAllBeepersInLine.w**>.

Initial condition:



Final condition:

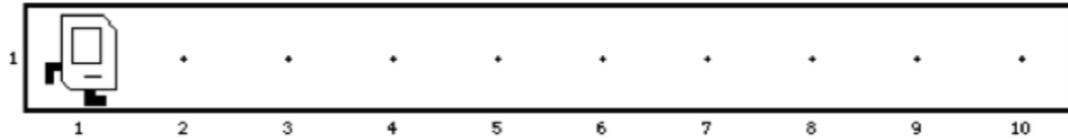


Figure 1: Initial condition of the world and the desired end result.

2.2 End of Project

Your project ends here. You may continue to tinker with the code to implement any desired features and discuss them with your section leader. Below in the **Section 3** are further tasks for you to implement if you are willing to continue practicing the topics. However, **do not** include any additional features that you implement after this point in to your submission if it modifies the desired behavior of the project.

3 Further Tasks

Tasks described in this section are **not** included to your project, but are provided for studying the topics further. **Do not** submit your project with any of these tasks completed. You will only be graded for the tasks in **Section 2**. Also note that tasks below are meant to be implemented on their own but may function together as well.

3.1 Generalizing the Solution

It is possible and shorter to write a solution that is a general answer to all possible worlds where you need to clear all beepers in a straight line. If you are willing to try this there is a second file named `<ClearAllBeepersInLine2.w>` given to you. You may use it to test your generalized solution.