COSC1073 Programming 1, Semester 1 2021

Week 3 Assessment

Create a Java Project prefixed with your student ID followed by -Week3, for example:
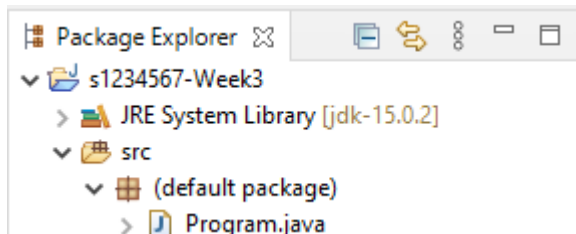
s1234567-Week3

Create a git repository and publish it to the **rmit-p1-s1-2021** organisation on GitHub with the same name as a **private** repository. The repository URL for the example project name above would be:

https://github.com/rmit-p1-s1-2021/s1234567-Week3

Instructions to create a git repository and publishing it to the **rmit-p1-s1-2021** organisation on GitHub can be found in TuteLab 1 and TuteLab 2.

Create a class called **Program** which contains the **main** method; you can use the default package. An example of the project structure is shown below:

Write the **main** method to prompt the user to enter 2 characters and a positive integer (i.e., a whole number). You can use the Scanner class to get input from the user.

Note: The 1st and 2nd character can be read in and stored as strings (i.e., strings that only contain 1 character) and you can read in and store the positive whole number as an int; you do not need to validate any input, you can assume only valid values will be entered at this stage.

After getting all the input, the program should display a number of lines equal to the integer entered, with the 1st line starting with a length of 1 and each subsequent line growing in length by 1. The output should alternate between displaying the first and second characters entered, always followed by a space.

See below for sample output of the program.

Sample Output

Sample output #1:

```
Enter 1st character: X
Enter 2nd character: Y
Enter number of lines: 3

X
Y X
Y X Y
```

Sample output #2:

```
Enter 1st character: A
Enter 2nd character: B
Enter number of lines: 10

A
B A
B A B
A B A B
A B A B A
B A B A B A
B A B A B A B
A B A B A B A B
A B A B A B A B A
B A B A B A B A B A
```

Marking Guide

Getting and storing input from the user	[2 marks]
Displaying the correct number of lines	[1 mark]
Displaying the correct number of characters on each line	[1 mark]
Alternating between displaying the first and second characters	[1 mark]
Code quality; GitHub repository, indentation, consistency, etc…	[1 mark]
Total	**[6 marks]**

Submission Instructions

Export the Eclipse project as an archive; the file name should be the same as the project name, for example **s1234567-Week3.zip** and submit the zip file to Canvas under Assignments.

Instructions to export an Eclipse project can be found on Canvas under Exporting Projects.

Academic Integrity and Plagiarism (Standard RMIT Warning)

Your code will be automatically checked for similarity against other submissions so please make sure your submitted project is entirely your own work.

Academic integrity is about honest presentation of your academic work. It means acknowledging the work of others while developing your own insights, knowledge, and ideas. You should take extreme care that you have:

- Acknowledged words, data, diagrams, models, frameworks and / or ideas of others you have quoted (i.e., directly copied), summarised, paraphrased, discussed, or mentioned in your assessment through the appropriate referencing methods.
- Provided a reference list of the publication details so your reader can locate the source if necessary. This includes material taken from internet sites.

If you do not acknowledge the sources of your material, you may be accused of plagiarism because you have passed off the work and ideas of another person without appropriate referencing, as if they were your own.

RMIT University treats plagiarism as a very serious offence constituting misconduct. Plagiarism covers a variety of inappropriate behaviours, including:

- Failure to properly document a source.
- Copyright material from the internet or databases.
- Collusion between students.

For further information on our policies and procedures, please refer to the University website.

Assessment Declaration

When you submit your project electronically, you agree to the RMIT Assessment Declaration.