

**Faculty of Engineering, University of Jaffna**  
**Department of Computer Engineering**  
**EC5080: Software Construction**  
**Lab 06: Classes and objects**

1. First, create an IntelliJ Java project and name it as EC5080\_Lab5\_RegNo
2. Starting at the topmost line of the file, insert the following under the comments. You need to choose one of them. If you get any assistance from anyone/book/internet please include that.

Certificate of Authenticity: (choose one from below)

// I certify the code of this lab is entirely my own work.

(or)

// I certify the code of this lab is entirely my own work,

// but I received assistance from [insert name (Instructor/websites)].

// Follow this with a description of the type of assistance.

You are expected to develop a simple Shell application capable of executing a few basic commands that can be extended later. The given skeleton code consists of three Java classes:

**GenericCommand.java:** This represents a generic command. A new command should extend this class and overwrite `handleCommand()` method.

**Shell.java:** This represents the basic shell class. To add a new command to the shell, you should implement the corresponding class and add the command in this class.

**Quit.java:** This is an implementation of quit command.

You are required to get familiar with the given code and extend the application to satisfy the functionalities below (they will be marked):

1. Extend the functionality of `Quit.java` class to print the number of commands executed before exiting.

For example, before quitting the shell should print “Executed 10 commands since starting”

2. Implement a new command less using a class called Less.java which prints the content of a text file on the screen. Command should take the file name to be read as an argument and should check if arguments are passed correctly.

3. Implement a new command copy using Copy.java which copy a file from source to destination. The command takes two arguments; the source file name followed by the destination file name.

Make sure to perform required tests etc. before executing a command. Paste and upload them in a PDF. You will be given marks for that.

Upload the zip file on/before given deadline via team.

Any plagiarized work will be given 0 marks.