

Introduction To Programming: Independent Investigative Effort 3

(See Canvas→Assignments for due dates and marks. Late submissions incur a 10% penalty on the full mark for each working date late; submission cut-off is 5 working days late. Marks turnaround time is approx. 10 working days after submissions close.)

Having trouble with watching recordings, usernames, passwords, access, etc.? Please call the [RMIT IT Service and Support Centre](#) for quick help on 03-9925 8888 and remember to ask for a reference number and pass it on to your instructor.

Need extensions or special consideration? Please follow the standard [Special Consideration process](#).

Please follow/complete all steps below in the given sequence:

1. Please check your [official RMIT Student email account](#) for important course communication.

2.a. [Watch any unwatched recordings](#) of the **Weekly Live Lecture** and do all missed tutorials before going further. Gaps in programming concepts will lead to difficulties. If you need further help, please also watch your Group's chat recordings.

2.b. If you need help in addition to what has been shown in the compulsory weekly live lecture, you are also expected to speak to your **group tutor via [discussion forums](#)** and attend/watch their live sessions. Please note that group tutors cannot debug your assessment code on your behalf as debugging is a part of every programming assessment.

3. Check any available feedback of your previous submissions and if you have any unresolved questions or if you need further feedback, post the relevant parts of your submitted work in a new post under Canvas→Discussions→[Independent Investigative Effort](#) and ask from your instructor. E.g. you can ask “*Gayan showed _____ but I did mine like _____, so which is the better approach and why?*”, etc. Please note that the university requires teaching to be conducted in an equitable manner so please only use email for matters such as special consideration.

4. How did you go during the past week? Please give feedback to Gayan so he can improve your learning experience, before it's too late, during this study period itself!

5. This week's programming task will cover the last set of concepts required by Assignment 1. You should aim to get the help of your tutors and make further revisions.

Coding exercise steps (Hint: Need help? Ask your tutor via Canvas→Discussions→"IIE03"):

Follow Canvas→[Modules](#)→[Week 3](#) first. We can use *if*-statements to perform checks and we can get the user to enter values for our programs to process. Make a copy of the week 1 template Eclipse project (ensure GTerm is updated to 2020.08.25 or newer as shown during the 7/Sep weekly live lecture) and rename it to IIE03. Implement the rest of the steps in your .java file and rename it to suit your application before submission. Include justification comments as required by the assignments (refer to assignment specifications).

a. As shown in the IIE02 solution, take inputs for 1 String, 1 integer, 1 floating point, 1 boolean and 1 char using a single use of the method `gt.getInputString`. Assume that the user will only enter values that are of the requested data type.

For each of the 5 data types, perform a check of your choice using an *if*-statements and create a different behaviour/pathway in the program. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

b. Make your behaviours/pathways more interesting by nesting if-statements (you do not need to nest all of them; you can create new if-statements to nest). **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

c. For some or all of the if-statements, add an *else* clause. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

d. For some or all of the if-statements, add an *else if* clause. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

Submission Checklist for Step 5:

- Ensure steps above have been followed in sequence.
- Ensure that there are no red dots (compilation errors) in your code. Code with red dots are not valid Java and cannot be marked.
- If you have not made a final submission for your Assignment 1, make a progress/dummy submission for Assignment 1 by submitting **your .java file to Canvas→Assignments→Assignment 1**. Do the same for Assignments 2 and 3 as well. Remember, you can overwrite this submission any time when you have a proper submission for your assignment.
- Take screenshots of the code and the running program (as you did for IIE01) and embed the **screenshots in a post under Canvas→Discussions→Independent Investigative Exercise 3**. The mark for this week's work will be given based on this submission.
- Download your own file(s) from the discussion forum and ensure that it is correct. If it is not, you can edit/delete your post and retry.

6. Optional: Make another copy of the program from #5 to perform the same via the console. All inputs must be taken via Scanner's `.nextLine` method and outputs must be via `System.out.print` or `System.out.println` methods. Note: This approach must not be used in Assignment 1. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**