Introduction To Programming: Independent Investigative Effort 1

Due: See Canvas→Assignments for due dates, marks and submission link.
Obtaining help method 1: Create a post in the corresponding Canvas→Discussions→IIE forum, post a screenshot of your preliminary/faulty along with a brief explanation and your tutor will help in a general way. Debugging will still need to be done by the student as it is an important aspect of programming.
Obtaining help method 2: Weekly tutor chats (not to be confused with 'live lecture') of week 1 will give directions (not solutions) on how to approach this IIE01. Check recordings if you cannot attend.
Getting feedback: For specific questions asked, you will receive feedback via the forum within 1-2 working days by your group tutor. If you ask during a tutor chat, you would receive feedback immediately.
Late submissions: Accepted for up to 1 week with an automatic 10% penalty for each day late (unless special consideration received).
Solution: Solution, recommended approach, common mistakes to avoid, etc. for major tasks will be shown during the 7/Dec week 2 weekly live lecture.
Marks: IIEs are not tests. Marks are given based on effort and not on correctness. Marks turnaround time is approx. 10 working days after submissions close.
Access issues: For non-programming technical issues (relating to infrastructure, passwords, 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.
Extensions: For all new extensions, apply for special consideration online. Contacting your tutors, instructors first will lead to delays.

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

1. Check your official @student.rmit.edu.au email account for announcements and other communication from the university. If getting in touch with your instructors, please only use this account (not Canvas inbox, messages, personal email, phone, Microsoft Teams, etc.)

2. Watch any unwatched recordings of the **Weekly Live Lecture** (and from week 2, complete all missed tutorials) **before going further**.

3. Is there something that you have not fully grasped from what has been covered so far? Please have your doubts clarified via one of the relevant forums under Canvas→Discussions. Leaving gaps has shown to be severely detrimental to learning.

4. Did you give feedback? Topic: End of week 1: Tell your coordinator how you went

5. This week's programming task will cover more of the 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→"IIE02"):
Follow Canvas→Modules→Week 2 first. As explained, Java has 8 primitive data types.

a. Make a copy of your Week 01 template Eclipse project and rename the project to IIE02 or similar, as shown during the week 1 'weekly live lecture'. Then rename the PleaseRenameMe.java to something appropriate to the application (avoid names such as IIE02.java; give it a personality!) but remember to follow class naming conventions (refer to IIE01). Now think of:

- a sequence of characters (arbitrary text),
- a single character
- a whole number,
- a number with a decimal point,
- a true or false value and

… then declare 5 variables suitable for the above and assign these values in those variables. You must follow Java naming conventions for variables. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

b. Now modify the code from step 5.a (there is no need to show the old version; you may remove it from your submission post if you have posted) so that the 5 variables receive their values from 5 separate user inputs using the `gt.getInputString` method. As shown in Canvas→Modules→Week 2, inputs taken as Strings will need to be converted to primitive data types using the wrapper classes of those primitive data types. **Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.**

c. For each data type+variable combination, 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.

d. For each declaration and condition, add justification comments as required by Assignment 1's specification. This is a skill at which you will get better with experience and it is important to get started. Are you stuck? Please ask your friendly tutor by creating a post in the relevant IIE forum.

e. [Optional to do but follow when solution is shown during the 'weekly live lecture']: Instead of having 5 separate prompts, take the inputs using a single .getInputString method invocation then store the individual pieces in the 5 separate variables.

Continued…

Submission Checklist for Step 5:

a. Ensure steps above have been followed in sequence.

b. Ensure that there are no red dots (compilation errors) in your code. Code with red dots are not valid Java and cannot be marked.

c. If you have not made a final submission for your Assignment 1, make a 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.

d. 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 2**. The mark for this week's work will be given based on this submission.

e. 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.