Question 1: (2 marks)

Do not pay attention to real meaning of objects, variables and their values in the questions below.
Write a class **Trapezium** (*in the default package of the NetBean*) with the following information:

Trapezium
-firstEdge:float -secondEdge:float -height:float
+**Trapezium**() +**Trapezium**(firstEdge:float, secondEdge:float, height:float) +getAcreage():float +getInfo():String +setFirstEdge(fe:float):void +setSecondEdge(se:float):void

Where:

- **Trapezium**() - default constructor.
- **Trapezium**(firstEdge:float, secondEdge:float, height:float) - constructor, which sets values to first edge, second edge and height of the trapezium.
- **getAcreage**():float – Returns the area of the trapezium with 2 decimal places.
- **getInfo**(): String – Returns information about whether the trapezium is a "**Regular trapezium**" (*firstEdge is different secondEdge*) or "**Isosceles trapezium**" (*first edge equals to second edge*)
- **setFirstEdge**(fe:float): void – update value to firstEdge. Valid values are greater than 0**.** Other else, print out "**Invalid value**"
- **setSecondEdge**(se:float):void – update value to secondEdge. Valid values are greater than 0**.** Other else, print out "**Invalid value**"

Do not format the result.

The program output might look something like:

Enter first edge: 12.5 Enter second edge: 17 Enter height: 8.3 1. Test getAcreage() 2. Test getInfo() 3. Test setFirstEdge() 4. Test setSecondEdge() Enter TC (1, 2, 3 or 4): 1 OUTPUT: **122.43**	Enter first edge: 12.5 Enter second edge: 17 Enter height: 8.3 1. Test getAcreage () 2. Test getInfo() 3. Test setFirstEdge() 4. Test setSecondEdge() Enter TC (1, 2, 3 or 4): 2 OUTPUT: **Regular trapezium**
Enter first edge: 12.5 Enter second edge: 17 Enter height: 8.3 1. Test getAcreage () 2. Test getInfo() 3. Test setFirstEdge() 4. Test setSecondEdge() Enter TC (1, 2, 3 or 4): 3 Enter new First edge: 0 OUTPUT: **Invalid value**	Enter first edge: 18 Enter second edge: 18 Enter height: 7 1. Test getAcreage () 2. Test getInfo() 3. Test setFirstEdge() 4. Test setSecondEdge() Enter TC (1, 2, 3 or 4): 2 OUTPUT: **Isosceles trapezium**

Read the instructions below carefully before start coding.

Students are ONLY allowed to use:

- Materials on his/her computer (including JDK, NetBeans, Window explorer, Winrar, Winzip).
- For distance learning: Google Meet, Hangout (for Exam Monitoring Purpose).

Follow the steps below to complete PE:

1. Create a folder to save given projects, e.g. PRO_given (1). Down load given materials to (1).
2. Steps to do question 1 (do the same for other questions): Open NetBeans, open the given Q1 project, then complete it according to the requirements in the exam. (Do not: delete given files, or create java file with the same name as given files).
3. Before submission: Run the function **"Clean and Build Project"** (Shift+F11), then rename the folder dist to RUN (or run). (If the folder RUN already exists, delete it before renaming).
4. **Submission:** to submit the project Q1, at first you must select Question No = 1, browse and select the project folder (e.g. 1, Q1 or Q1X,...) then click the **Submit** button. Do the same for other questions. **Do not submit** the un-edited given project.
5. **Do not use accented Vietnamese** when writing comments in programs.
6. Software tools must be used: **NetBeans IDE** and **Java JDK 1.8**.
   If at least one of the above requirements is not followed, the exam will get ZERO.

Trouble shooting:

If the given project (e.g. Q1) runs with error, you need to run "Clean and Build Project" (Shift+F11). If still error, try to rename the project, e.g. from Q1 to Q1X or Q1Y,...

If the size of the project is too large for submission, try to delete the folder "build".
