

## EECS4313: Homework 2

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**Goal:** practice writing a set of test cases to automate testing of the given code using [Equivalence Class Testing](#).

**Description:** The program that you will be testing is going to compute the fee for domestic and long distance calls. The table by which the fee is computed is given below.

	Domestic (North America)	Europe	Other
Call Duration $\leq$ 20 min	\$0.05	\$0.1	\$0.5
Call Duration $>$ 20 min	\$0.1	\$0.5	\$1

If a call takes more than 20 minutes, then the first 20 minutes is computed by the first row of the table, and the rest is computed by the second line of the table above.

Call duration of seconds are rounded up to the next larger minute. For example, if a call takes 20.0001 minutes, then it is charged for 21 minutes (I know, it is not fair!)

No call lasts more than 1 hour.

**Task 1:** Write the equivalence classes of all valid and invalid data for both the inputs and then write all possible sets of test cases that tests `bill()` using [Improved Robust Strong Equivalence Class](#) testing.

**Task 2:** Fill in the table below with the test cases that you have written. For Example, if you wrote three test cases, then the table below should have 3 rows.

id	Selected Inputs	Description of the test case	Actual Output	Expected Output	Passed?
1					
2					
3					

**Submission:** Two files should be submitted:

- 1- A pdf file that contains the table above.
- 2- The junit test cases that contains the test cases mentioned in the table. Please note that you should use [junit 5](#). Otherwise, no grade will be awarded.