A telecom company wants to implement a simple system for call billing.

In their call plans there are different types of tariff:
- Regular calls at 0.05 per minute
- Late night calls (for example from 10pm to 4am) at 0.02 per minute
- Weekend calls at 0.01 per minute

There are two kinds of clients that the company manages:
- New clients who have been given a discount on their regular calls (regular calls pay the same rate as late night calls)
- Existing clients who pay the standard rates mentioned above

In addition the company uses the following rule to charge for local & international calls:
- International calls double the rate per minute

The company is interested in implementing a simple billing system to calculate the total charge to a client given their call history.

Please use an object oriented language of your choice to allow the company to calculate the total charge to a client given their call history.

Note:
* You DO NOT need to implement any UI for this exercise.
* You can assume that the call history data is already given to you (you do not need to write code to load it from a file, database or similar source).
* All the rules the company requires to calculate the charge for a call are given above. There are no other rules to apply.
* You do not need to worry about determining if a call is local or international. You can assume there is a method that can do that for you.

Extra credit:

1. Implement a new Stack class pretending your language does not have one where you can push or pop elements (integers for example) and which will raise an exception if you try to pop an element when the stack is empty.

2. Change your implementation from step 1 to not use any wired logic (if/else, switch, ternary operators, etc are not allowed) and instead apply polymorphism to achieve the same behaviour.