

# ASSIGNMENT 3

[Python!]

## General Instructions

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**Deadline : 02<sup>nd</sup> November, 2018 (Friday) 11:55 PM**

### Submission Format

For each question, store your files in a folder named Question1, Question2 etc. Put these folders in a zip file named <roll\_number>\_assignment3.zip (Example : 20172010\_assignment3.zip). This zip file is to be submitted on Moodle.

**If the submission format isn't followed, you will get a straight zero.**

### Plagiarism and Copying

If anyone is found copying code from the friends or the internet, the one who helps and the who got the help will get a straight zero and any kind of plagiarism will not be tolerated.

All the Best :)

### Doubts and Queries

If you have any doubts regarding any questions or submission formats, you can ask them on Moodle

## A Small Meme

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**TA: You have been working very hard. Take these pills everyday till you get another assignment.**

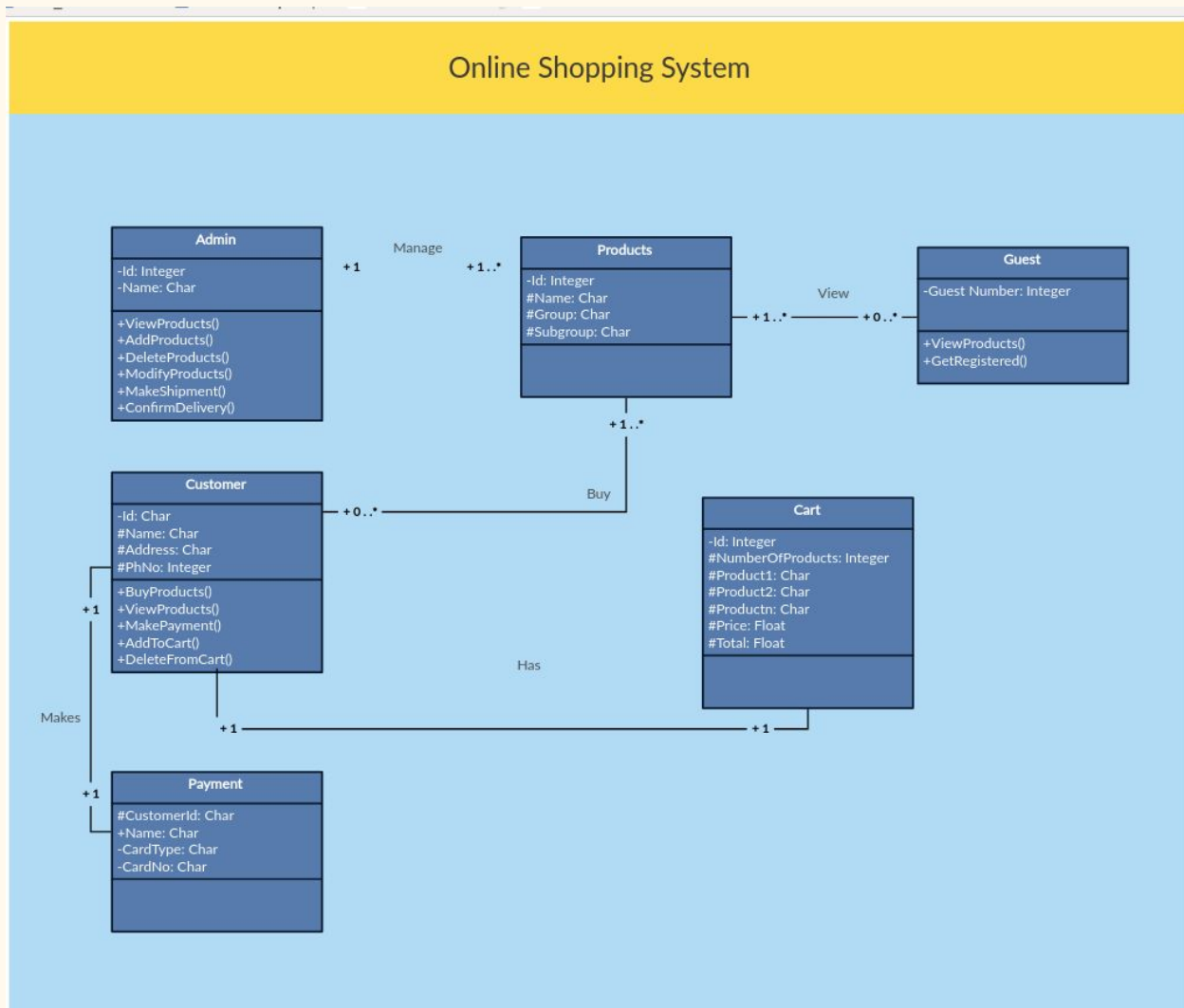
**Me: But there are no pills.**

**TA: Exactly**



## Questions

### (1) Online Shopping System



The task is to design and develop a Object oriented model where users can buy their products from Online store.

Customer :

We need to have a model for all the registered users.

Can search for products.

If they need to buy ,they have to be a registered users.

Once the product is bought,maintain list of products bought by user.

Admin :

He maintains the warehouse, list of products available in the store,shipment details etc.

He can visualize all the shipment,product details ,purchasing rate of users using graphs.

Information storage:

All these information can be stored and retrieved from file or pickle format can be used. (Available in python).

## (2) Pyshell

Design a bash shell using python commands. You are expected to implement the following commands:

- cd
- ls
- pwd
- touch
- grep
- head
- tail
- touch
- tr
- sed (at least the substitution operation)
- diff

**Bonus:** Implement some basic commonly used flags of all of these commands.

Write one python file which listens to user inputs and executes them and exits with the exit command.

Make sure your program handles exceptions gracefully.

Make a file containing the various commands that your program accepts.

Note: You are obviously not allowed to use the **os.system()** function or the **subprocess module** or anything other module for that matter to run these commands directly. Duh!

As always, Here's a python easter egg: Open a python prompt in your terminal and run 'import antigravity'