OPS435 Mid-TermTest
Summer 2018 (Section A)

Student Name: _____

You are allowed to use your notes, books, and resources on your computer. You have 60 minutes for this test. You are not allowed to communicate with other person in class or vai the network. **You are not allowed to use the Internet except for submitting your work, and only when the professor tells you it is time to do so.**

Weighting: 20% of you final grade   20 MARKS (5 EACH)

Use your Linux machine / VM to create a Python file for each of the questions in this test. Make sure you name your files correctly. At the end of the test you will have five minutes to upload your files to Blackboard.

1. **mt-q1.py** Write a Python program that will receive two numbers as arguments, and multiply the two numbers. It will then ask the user to guess what the result is, and tell the user whether they got it right. For example: (The user's input are 28 and 48):

   ```
   ./mt-q1.py 4 7
   Please enter how much is 4 * 7: 28
   You're correct!
   ./mt-q1.py 7 7
   Please enter how much is 7 * 7: 48
   Sorry! It's wrong. Correct Answer is 49.
   ```

2. **mt-q2.py** Write a Python program that can receive any number of arguments using the sys module. It will then print all these arguments in the reverse order that they were provided. As you iterate the arguments list, create a new list with the arguments in the reverse order. Print that list at the end of your program. For example:

   ```
   ./mt-q2.py Mon Tue Wed Thu Fri
   Fri
   Thu
   Wed
   Tue
   Mon
   List provided: ['Fri', 'Thu', 'Wed', 'Tue', 'Mon']
   ```

3. **mt-q3.py** Write a Python program that will keep asking the user for two numbers, until the user provides two such numbers that the first one is divisible by the second one. For example:

```
./mt-q3.py
Enter any two numbers:
Please enter the first number: 22
Please enter the second number: 44
22 is not divisible by 44. Please try again.
Please enter the first number: 44
Please enter the second number: 22
OK, 44 is divisible by 22. Thanks!
```

4. **mt-q4.py** Create two Python functions: (a) the first function named get_mark() which will ask the user to input a number 0-100 and return the user's input as an integer; (b) the second function named mark_2_grade(mark), which will take an integer from 0 to 100 as argument and return a grade according to the following conversion table: .

Mark	Grade
90 – 100	A
80 – 89	B
70 – 79	C
60 – 69	D
Below 60	F

Write a Python program which includes the above two functions and calls the function get_mark() and pass the returned value from it as an argument to the second function mark_2_grade(), and finally print out the grade returned by mark_2_grade().

For example:

```
./t1-q4.py
Please enter a mark (0-100): 92
Your grade is A.
./mt-q4.py
Please enter a mark (0-100): 70
Your grade is C.
```

SUBMISSION

- If you finish early - you have to wait until it is time to submit.
- Once the time is announced - turn on your Internet connection, go to Blackboard, navigate to Assignments/Mid-Term-Practical, and upload your four files there.
- You may not use the internet for any other purpose until the test submission is closed.