LAB - 3

IIIT Delhi is organising fresher's party. Gaurav is really excited to go to this party however he wants to ask his brother Jay to come with him. Jay loves python and thus decides to give Gaurav a problem which he has to code to convince him to come to the party.
The problem is:

Given any three numbers x, y and z, he has to convert it into Magic Number. A Magic Number is defined as follows: $((x^2+y)\%z)^5$

Gaurav really wants Jay to come and thus needs your help to solve this problem.
You need to implement a function **`find_magic_num(x,y,z)`** which takes x, y and z as parameters and returns the magic number.

TASK 1 :

Now Gaurav being a clever student wants to import this function.
Thus he decides to:

1. Make a module named "magic_module.py" and writes his function **`find_magic_num(x,y,z)`** in it.
2. Then he opens the command line/ terminal, goes to the directory/folder where his magic_module.py is saved, start python and imports his module and runs the function.

Note: Remember the **`import`** command taught in the class will be used. (See the following example defining **`get_sum(a,b)`** function in <sum_module.py>. Try running it and understand the code.)

<sum_module.py>

```
-----------------------------------
def get_sum(a, b):
      """
      This function finds the sum of 2
integers
      @params: Two integers a and b
      Returns: An integer
      """
      C = a + b
      return C




-----------------------------------
```

```
>>> import sum_module
>>> sum_module.get_sum(1,2)
3
>>> help(sum_module)
Help on module sum_module:

NAME
    sum_module

FUNCTIONS


    get_sum(a, b)
        This function finds the sum of 2 integers
        @params: Two integers a and b
        Returns: An integer
```

TASK 2:

Jay doesn't like using import and thus wants Gaurav to implement a function and call it within the same file by taking the user input. In this task, you need to create a new file **<magic_one_file.py>** and write the same function and also it's call within this file only.

E.g. :

<sum_one_file.py>

```
def get_sum(a, b):
      """
      This function finds the sum of 2 integers
      @params: Two integers a and b
      Returns: An integer
      """
      C = a + b
      return C

i=int(input())
j=int(input())

print(get_sum(i,j))
```

```
C:\Users\Jay\Desktop\temp>python sum_one_file.py
12
14
26
```

TASK 3:

Finally, the coding questions were done but viva round was remaining. You need to help Gaurav one last time, as Jay is waiting. Save your answers in a file named <answers.txt>

Q1. What is the use of triple quotes? How did it help us in the above-illustrated case in Task 1?
Q2. What is the difference between

1. import xyz
2. from xyz import abc

Q3. Are you excited for the fresher's party?

GOOD! You have completed all the Tasks. Now compress all the files into zip format.
Files to be zipped:

1. magic_module.py
2. magic_one_file.py
3. answer.txt

The zipped file should be named as **<name>_<rollno>.zip** for example gaurav_17288.zip

Upload the zipped file on classroom and Turn it In.