Lab 4 - Functions

SUBMIT original code in Python to solve the problem below.

Please be aware that copying and pasting code from any other source other than code you have explicitly written on your own is considered plagiarism. If you receive help, that is fine (document help in the comments of your code) however you need to write your own code, name your own variables, and comment your own code. Students turning in the exact same work as another student will all be given zeros. Plagiarism is not tolerated, and students found to be plagiarizing will be given a zero and reported to the University with the possibility of termination of the class and degree program.

Write a program that will allow a manager to determine and the cost of a resort vacation. A resort client will be able to book a vacation, dining and special excursions. The client (user) will enter the room selection and the number of days of the vacation. The room options are:

- Two Queen Beds \$375/night
- One King Bed \$350/night
- Queen Suite \$525/night
- King Suite \$475/night

Meal Options:

- Brunch \$25 per meal
- Dinner \$75 per meal
 (15% gratuity will automatically be added to the charges)

Excursions: (multiple excursions can be selected)

- Picnic \$50
- Snorkeling \$25 per person
- Guided Hike \$17 per person
- Boat Dinner \$200

When writing this program please include (at least) the following functions/methods.

A **roomCost** function which will accept the number of nights and the room type (these values will be passed to the function) and the total cost will be returned to the calling program

A **mealCost** function this function will receive the number of brunches and dinners through the parameter list. The function will return the total meal cost (including gratuity) to the calling program.

An **excursionCost** function which will accept the number of each event requested and return the total cost of excursions to the calling program.

The program will display the number of nights of the stay and the room cost, the meal cost and excursion cost. A total for all items selected will be displayed. You do not need to truncate or round your output.

Save your program as Lab4.py and upload your source file to the appropriate dropbox in GradeScope, *NOT D2L!*

Output Example

Input

Number of nights: 5
Number of people: 2

Room Types:

(1) - Two Queen Beds

(2) - One King Bed

(3) - Queen Suite

(4) - King Suit

Select Type: 1

How many Brunches: **5** How many Dinners: **5**

Picnic?: y Snorkeling?: y Guided Hike?: y Boat Dinner?: y

Output

Room Cost: \$1875 Meal Cost: \$575 Excursion Cost: \$334

Total Cost: \$2784

REMEMBER

Include the comment heading at the top of your code.

```
0 # Program Name: Lab1.py (use the name the program is
    saved as)
0 # Course: IT1114/Section XXX
0 # Student Name: John Doe
0 # Assignment Number: Lab#
0 # Due Date: xx/xx/ 20XX
0 # Purpose: What does the program do (in a few
    sentences)?
0 # List specific resources used to complete the
    assignment.
```

Place comments within your code explaining the programming segments