CS21 Chapter 5, Part II
Value-returning functions.

For each of the following problems, you will be asked to write a value-returning function (or two), and then use them in a program. Each of your programs should have a `main()` function that you will use to call other functions.

1. (money.py)

Function name	Input Argument(s)	Processing	Output
`usd2can`	U.S. dollar amount (float)	Define `RATE = 1.33` Convert to Canadian dollars	Return Canadian dollars

Using *usd2can*	**Sample run**
In `main()`, after prompting the user for USD, pass that value to `usd2can`. (You do not need to validate the input). Use the returned Canadian equivalent in a user-friendly print statement.	Let's convert your US Dollars to Canadian Dollars Enter the value of your US Dollars: 237.84 This amount is worth $ 316.33 Canadian dollars.

2. (rooms.py)

Function name	Input Argument(s)	Processing	Output
`room_draw`	No input required	Generate a random integer between 1 and 4 (inclusive). Use that integer with IF construct to assign area of campus: 1 = *University Heights*, 2 = *Main Campus,* 3 = *Athletic Campus,* 4 = *Trinity Campus*	Return assigned area as a string

Using *roomdraw*	**Sample run**
In `main()`, call `room_draw` ten times. Do not use 10 individual calls on `room_draw`.	Trinity Campus Main Campus University Heights University Heights University Heights Main Campus Main Campus University Heights Trinity Campus Athletic Campus

3. (grades. py)

Function name	Input Argument(s)	Processing	Output
`calc_average`	5 numeric test scores	Calculate the arithmetic mean of the numbers.	Return the average/mean of the five grades (float)
`determine_grade`	A numeric test score	Determine a letter grade based on the following: *90–100 A* *80–89 B* *70–79 C* *60–69 D* *Below 60 F*	Return the letter grade as a string.

Using `calc_average` and `determine_grade`

In `main()`, ask the user to enter five test scores. The program will use the two functions to produce a table like the one to the right. You'll need to use `determine_grade` to get the letter grade for each individual score. Then, call `calc_average` to determine the average grade. Finally, use `determine_grade` to get the letter grade of the overall average.

For ease, you may use tabs for spacing in the column.

If you have time, add input validation to the 5 scores.

Sample run

```
Enter score 1: 89
Enter score 2: 33
Enter score 3: 97
Enter score 4: 68
Enter score 5: 75

Scores     numeric grade letter grade
-------------------------------------
score 1:       89              B
score 2:       33              F
score 3:       97              A
score 4:       68              D
score 5:       75              C
-------------------------------------
Average score:  72.4           C
```