Assignment # 2

Submission instructions:
- You are required to submit your source code (.py) for each question unless specified otherwise.
- At the beginning of each code add a comment specifying your name, assignment #, and question # following the below format:

```
'''
Your name [First last]
ID
Homework x
Question x
'''
```

- At the end of your code add as a comment your answer for each question (if any) along with your code sample output.
- Compress the source code file(s) (using zip or tar) and submit the compressed file through Moodle.

Q1. Write a program that determines whether a number entered by the user is a perfect number or no. A perfect number is a number whose sum of factors (excluding the number) equals the number. i.e, a positive integer that is equal to the sum of its proper divisors. The first perfect number is: 6 (1+2+3).

Sample Output1:
```
Enter a number 4

4  is not a perfect number
```

Sample Output2:
```
Enter a number 6

6  is a perfect number
```

Q2. Write a program that collects data and calculate the average rainfall over a period of years. The program should first ask for the number of years. Then, for each month in the year it should ask the user for the inches of rainfall for that month. At the end, the program should display the total number of months, the total inches of rainfall, and the average rainfall per month for the entire period.

Sample Output:

Enter the number of years: 2
For year 1 :
Enter the rainfall amount for the month: 1.3
Enter the rainfall amount for the month: 0
Enter the rainfall amount for the month: 2.3
Enter the rainfall amount for the month: 2.2
Enter the rainfall amount for the month: 2.6
Enter the rainfall amount for the month: 3
Enter the rainfall amount for the month: 4.1
Enter the rainfall amount for the month: 5
Enter the rainfall amount for the month: 8
Enter the rainfall amount for the month: 8.1
Enter the rainfall amount for the month: 6
Enter the rainfall amount for the month: 6.2
For year 2 :
Enter the rainfall amount for the month: 3.2
Enter the rainfall amount for the month: 1
Enter the rainfall amount for the month: 1.6
Enter the rainfall amount for the month: 2
Enter the rainfall amount for the month: 2.89
Enter the rainfall amount for the month: 3
Enter the rainfall amount for the month: 7
Enter the rainfall amount for the month: 5.5
Enter the rainfall amount for the month: 4.9
Enter the rainfall amount for the month: 1.47
Enter the rainfall amount for the month: 1.04
Enter the rainfall amount for the month: 1
For 24 months
Total rainfall: 83.40 inches
Average monthly rainfall: 3.48 inches