MIT 1

Programming Methods I (Python)

Exercise 1 of 6

Instruction: Attempt all Questions.[1]

1.1. Write a program which repeatedly reads numbers until the user enters **"done".** Once **"done"** is entered, print out the total, count, and average of the numbers. If the user enters anything other than a number, detect their mistake using try and except and print an error message and skip to the next number.

    Sample

```
Enter a number: 4
Enter a number: 5
Enter a number: bad data
Invalid input
Enter a number: 7
Enter a number: done
Total = 16, Count = 3 and Average = 5.3333333333
```

1.2. Jane owns a money lending business called Save To Grow Credit that loans out money. A given client of this company is given a loan that has to be repaid in a month's time (30 days) or less days with 10% interest. If the client fails to pay at the end of 30 days, the client is charged a fine of 1% of the loan per day. Write a python application that determines the total amount that is paid by the client to the company after a given number of days?

    Sample

```
Enter Client name:              John
Enter amount of loan:           1000
Enter days taken with the loan: 30
Total amount from John is:      1100.
```
```
Enter Client name:              Peter
Enter amount of loan:           1000
Enter days taken with the loan: 40
Total amount from Peter is:     1200.
```

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[1] ***Rubrics****: Marks awarded on the basis of: Pseudo Code, Quality and Complexity of the Solution, Comments and Documentation, Ease of Use and Navigability, Overall Solution Integration and Presentation!*