Assignment for 27-01-2021

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.

2) Write a Python program to reverse words in a sentence.

3) Write a Python program which takes a name as input and print the initials.

4) Write a program in Python to create histogram of values from a list of values.

5) A company has four salespeople (1 to 4) who sell five different products (1 to 5). Once a day, each salesperson passes in a slip for each different type of product sold. Each slip contains:
a) The salesperson number.
b) The product number.
c) The number of that product sold that day.
Thus, each salesperson passes in between 0 and 5 sales slips per day. Assume that the information from all of the slips for last month is available. Write a program that will read all this information for last month’s sales and summarize the total sales by salesperson by product. All totals should be stored in list **sales**. After processing all the information for last month, display the results in tabular format, with each of the columns representing a particular salesperson and each of the rows representing a particular product. Cross-total each row to get the total sales of each product for last month; cross-total each column to get the total sales by salesperson for last month. Your tabular printout should include these cross-totals to the right of the totaled rows and at the bottom of the totaled columns.

6) Write a Python program to transpose a matrix.

7) Write a Python program to add two matrices.

8) Write a program in Python to do searching either linear or binary. The choice will be provided by the user.

9) Write a Python program that creates two sets. One of even numbers in range 1-10 and the other has all composite numbers in range 1-20. Demonstrate the use of all( ), issuperset(), len(), and sum() functions on the sets.

10) Write a Python program that displays a menu and its price. Take the order from the customer. Check if the ordered product is in the menu. In case it is not there, the customer should be asked to reorder and if it is present, then product should be added

in the bill.

11) Write a Python program using function which accepts n as input and returns the average from 1 to n, calculates median and mode.

12) Write a program in Python that accepts date of birth along with other personal details of a person. Throw an exception if an invalid date is entered.

Rules and Instructions:

Check out your question numbers from the rule set below. You need to do any 2 programs from the given set of 3. If possible do all 3 programs in the set.
Provide the question, program code and output of your program. Upload in PDF file only.

Set 1: For Roll Numbers 1-17
Questons: 1, 5 ,12

Set 2: For Roll Numbers 18-34
Questions : 2, 6, 11

Set 3: For Roll Numbers 35-51
Questions: 3, 7 , 10

Set 4: For Roll Numbers 52 -68
Questions: 4, 8, 9