# Assignment -1

1.Write a program which will find all such numbers which are divisible by 7 but are not a multiple of 5, between 2000 and 3200 (both included). The numbers obtained should be printed in a comma-separated sequence on a single line.

2.With a given integral number n, write a program to generate a dictionary that contains (i, i*i) such that is an integral number between 1 and n (both included). and then the program should print the dictionary. Suppose the following input is supplied to the program: 8 Then, the output should be: {1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64}

3.Write a program which accepts a sequence of comma-separated numbers from console and generate a list and a tuple which contains every number. Suppose the following input is supplied to the program: 34,67,55,33,12,98 Then, the output should be: ['34', '67', '55', '33', '12', '98'] ('34', '67', '55', '33', '12', '98')

4.Write a program that accepts a comma separated sequence of words as input and prints the words ina comma-separated sequence after sorting them alphabetically. Suppose the following input is supplied to the program: without, hello, bag, world Then, the output should be: bag,hello,without,world

5.Write a program that accepts a sentence and calculate the number of letters and digits. Suppose the following input is supplied to the program: hello world! 123 Then, the output should be: LETTERS 10 DIGITS 3

6.Write a program that accepts a sentence and calculate the number of upper case letters and lower case letters. Suppose the following input is supplied to the program: Hello world! Then, the output should be: UPPER CASE 1 LOWER CASE 9

7.Write a program that computes the net amount of a bank account based a transaction log from console input.The transaction log format is shown as following: D 100 W 200 D means deposit while W means withdrawal. Suppose the following input is supplied to the program: D 300 D 300 W 200 D 100 Then, the output should be: 500

8.A website requires the users to input username and password to register. Write a program to check the validity of password input by users. Following are the criteria for checking the password:

At least 1 letter between [a-z]

At least 1 number between [0-9]

At least 1 letter between [A-Z]

At least 1 character from [$#@]

Minimum length of transaction password: 6

Maximum length of transaction password: 12 Your program should accept a sequence of comma separated passwords and will check them according to the above criteria. Passwords that match the criteria are to be printed, each separated by a comma. Example If the following passwords are given as input to the program: ABd1234@1,a F1#,2w3E*,2We3345 Then, the output of the program should be: ABd1234@1

9.Define a function which can print a dictionary where the keys are numbers between 1 and 20 (both included) and the values are square of keys.

10.Define a function which can generate a list where the values are square of numbers between 1 and 20 (both included). Then the function needs to print the last 5 elements in the list.