Ex.1 Deep learning (MCSE603P)

1. Get the following input from the user:
   first name and last name.
   Write a Python program to print as
   > *Hello first name last name*
   > *Welcome to Python!*

2. Assign x = 8 and y = 2. Evaluate the following expressions and write the output,
   a) x + y * 3
   b) (x + y) * 3
   c) x ** y
   d) x % y

3. An employee's total weekly pay equals the hourly wage multiplied by the total number of regular hours plus any overtime pay. Overtime pay equals the total overtime hours multiplied by 1.5 times the hourly wage. Write a program that takes as inputs the hourly wage, total regular hours, and total overtime hours and displays an employee's total weekly pay.

4. A company decides to give bonus to all its employees for Diwali. A 5% bonus on salary is given to the male workers and 15% bonus on salary to the female workers. Ifthe salary of the employee is less than Rs. 10000/- then the employee gets an extra 2%bonus on salary. Calculate the bonus that the employee will get and display the total salary.

5. Write a series of Python statements that will read three strings from the user, and then print them in dictionary order. (Note: you can compare two strings using the relational operators).

6. Write a program that takes user's name and PAN card number. Validate the information using string functions

7. Write a Python program to parse an email id to print from which email server it was sent

8. Write a Python program to strip a set of characters from a string Encrypt a given message by "rotating" each letter by a fixed number of places. To rotate a letter means to shift it through the alphabet, wrapping around to the beginning if necessary, so 'A' rotated by 3 is 'D' and 'Z' rotated by 1 is 'A'. Write a function called rotate_word that takes a string and an integer as parameters, and returns a new string that contains the letters from the original string rotated by the given amount. E.g Given String: HAL Encrypted String: JCN (Rotated by 2)

9. Write a python program using functions to implement Ackerman function.

10. Given a list, find frequency of each element and save it as list of tuple [(number, frequency)]. Input : test_list = [4, 5, 4, 5, 6, 6, 5] Output : [(4, 2), (5, 3), (6, 2)] Input : test_list = [4, 5, 4, 5, 6, 6, 6] Output : [(4, 2), (5, 3), (6, 3)]

11. Write a python program to remove duplicates from tuple.

12. Give an appropriate list comprehension for each of the following: i) L1 = [1, 'x', 4, 5.6, 'z', 9, 'a', 0, 4] create a list which consists of integer values. ii) Producing a list of consonants that appear in string w. iii) Multiples of 10 (n values) iv) Construct a list of the form: ['1a','2a','3a','4a'] v) Create a list which stores the sum of each of the elements from the two lists.

13. Obtain a nested list use looping constructs and list comprehension to flatten the list. Example: [[1],[2,3],[4,5,6],[7,8,9,10]] o/p: [1,2,3,4,5,6,7,8,9,10]

14. Create a dictionary for 6 employee details with empno as key, name, dob and net-pay as list of values use appropriate dictionary methods: a. Create a dictionary with the above information. b. Insert a new employee details as the second employee c. Delete the employee at the 4th position d. Delete the last employee e. Increment the salary of all employees by 5%

15. Consider the student details are maintained using nested dictionary as follows: {Reg no: {subcode: CAT1, CAT2, SAT}}

a..Create nested dictionary for three subjects b. Display the information of a student given his register number c. To display the marks of a student given his subject code d. Update the details of the student given the register number.

16. Write a Python code to read the content of 'ebook.txt' and display the contents of the file onto the console.

17. Write a function 'display_words()' in python to read lines from a text file "ebook.txt", and returns a list with words less than 4 characters.

18.Create a CSV file and store student details like Name, Register number and CGPA. Write a python code to read the file content and display the content. Duplicate entries and null value entries has to be ignored while displaying.