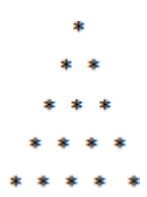
B.C.A. SEM - 6 Python Programming Practical List

Unit - 1	
1.	**Create a script to print "Hello World" in Python.**
2.	**Create a program to find whether given number is odd or even. [Take input from user]**
3.	**Take input from user and find factorial of a number.**
4.	**Using while loop print Fibonacci series.**
5.	Print the following pattern A A B A B C A B C D A B C D E [Take input from user]
Unit - 2	
6.	**Create a program to find whether given number is palindrome or not.**
7.	**Create a list in python and perform following operations:** **a) Print length of the list** **b) Append an item to the list** **c) Insert an item to the list** **d) Find index number of an item** **e) Remove an item from list** **f) Delete an item with specified index**
8.	**Given a tuple** **n= (19, 147, 36, 87, 97, 239, 6, 34)** **a) Display elements of tuple** **b) Display lowest tuple elements** **c) Display largest tuple elements** **d) Difference between largest and lowest tuple element**
9.	**Return a new set of identical items from two sets in Python.** **e.g.** **set1 = {10, 20, 30, 40, 50}** **set2 = {30, 40, 50, 60, 70}** **O/p:** **{40, 50, 30}**
10.	**Construct the following pattern.** 

11.	Write a Python program to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x*x). e.g. Input: 10
	Output : {1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100}
Unit –3	
12.	**Write a Python function that accepts a string and count the number of upper, lower case letters, digits and other characters.** **Input : How Are You, sir?** **Output :** **No. of Upper case characters : 3** **No. of Lower case Characters : 9** **No. of Digits : 0** **No. of Other Characters : 9**
13.	**Write a Python function that accepts a string and returns the string in Uppercase.** **Input: Good Morning, sir.** **Output: GOOD MORNING, SIR.**
14.	**Create a python function that accepts a list of integer elements as an argument and returns a list with ONLY even numbers of elements.** **Input List : [10, 21, 34, 53, 85, 70, 69]** **Output List : [10, 34, 70]**
15.	**Write a Python function that takes a list and returns a new list with unique/distinct elements from the first list.** **Input List : [1, 2, 3, 3, 3, 3, 4, 4, 4, 5]** **Output List : [1, 2, 3, 4, 5]**
16.	**Write a python function that accepts a list of string elements as an argument and returns a list with reverse of each element.** **Input List : [“Anand”, “Borsad”, “Dakor”, “Nadiad”]** **Output List : [“dnanA”, “dasroB”, “rokaD”, “daidaN”]**

17.	**Write a Python program to create a calculator class. Include methods for basic Arithmetic operations.**
18.	**Write a Python program to create a class representing a Rectangle. Include methods to calculate its area and perimeter.** **Area of a Rectangle = L * B and** **Perimeter of a Rectangle = 2(L + B)** **where L is length and B is breadth of a rectangle.**
19.	Write a python function that accepts a list of string elements as an argument and returns a listwith ONLY first letter of each element. Input List : [“Anand”, “Borsad”, “Dakor”, “Nadiad”] Output List : [“A”, “B”, “D”, “N”]
20.	Write a python function that accepts a list of string elements as an argument and returns a list with length of each element. Input List : [“Anand”, “VVN”, “Dakor”, “Nadiad”] Output List : [5, 3, 5, 6]
21.	Write a Python function that accepts a list of integer elements as an argument and returns two separate lists of odd and even elements. Original list of integers: [1, 2, 3, 4, 5, 6, 7, 8, 9, 10] Odd numbers list: [1, 3, 5, 7, 9] Even numbers list: [2, 4, 6, 8, 10]
Unit – 4	
File handling	
22.	**Write a Python program to read an entire text file.**
23.	**Write a Python program to append text to a file and display the text.**
24.	**Write a Python program to copy the contents of a file to another file.**
25.	**Write a Python program that takes a text file as input and returns the number of wordsof a given text file.**
26.	Write a Python program to get the file size of a plain file.
Database Connectivity	
27.	**Write a Python program to connect with database and store record of employee and display records.**
28.	**Write a Python program to connect with database and search employee number in table employee and display record, if employee number is not found display appropriate message.**
29.	**Write a Python program to connect with database** **a) Update the employee record of entered employee number.** **b) Delete the record of entered employee number.** **c) Store record of employee and display records.**
30.	**Write a Python program to Print the names that start with j.**

Note: Only Bold Definitions are compulsory to be written in Journals.