Course Code: BMC 351

Course Name: Python Programming Lab

MCA-3rd Semester

List of Experiments

UNIT	SNO	Name of Experiments
1	1	Write a Python program to display 'Hello World'"
1	2	Write a Python program to sum two numbers.
1	3	Write a Program to declare variables of different data types, and use type functions on these variables.
1	4	Write a Program to declare variables of different data types, and use id functions on these variables.
1	5	Write a Program to take user input and display it.
1	6	Write a Program to use all python operators.
1	7	Write a Program using a conditional if statement to check whether a given number is positive, negative, or zero.
1	8	Write a Program to demonstrate nested if statements for grading students based on marks.
1	9	Write a Program using if-elif-else statements to determine the largest of three numbers.
1	10	Write a program to find the largest of three numbers.
1	11	Write a program to check if a number is even or odd
1	12	Write a ptrogram to check whether a number is prime or not.
2	13	Write a program to create a list and perform basic operations (insert, delete, update).

2	14	Write a program to find the sum, maximum, and minimum of list elements.
2	15	Write a program to sort a list in ascending and descending order.
2	16	Write a program to count even and odd numbers in a list.
2	17	Write a program to implement linear search using a list.
2	18	Write a program to merge two lists.
2	19	Write a program to demonstrate iteration using a list with a for loop.
	20	Write a program to create a tuple and display its elements.
2	21	Write a program to perform basic operations on a tuple using loops.
2	22	Write a program to demonstrate set operations such as union, intersection, and difference.
2	23	Write a program to perform string operations such as slicing, concatenation, and reversal.
2	24	Write a program to work with 2 strings and check palindrome.
3	25	Write a program to create a dictionary and display its elements.
3	26	Write a program to add, update, and delete elements from a dictionary.
3	27	Write a program to check if a key exists in a dictionary.
3	28	Write a program to merge two dictionaries.
3	29	Write a program to get the keys, values, and items of a dictionary.
3	30	Write a program to create a function that adds two numbers.
3	31	Write a function in python to calculate and display the average marks of students.

3	32	Write a python function to display n terms of Fibonacci series using recursion.
3	33	Construct a function perfect_square(number) that returns a number if it is a perfect square otherwise it returns -1.
3	34	Develop a simple calculator using functions in Python.
3	35	Write a program to return multiple values from a function.
3	36	Write a program to calculate the area of different shapes using functions.
4	37	Write a program to print all python keywords using keyword modules
4	38	Write a program to clear screen using os modules
4	39	Write a program to change Python Prompt using sys modules
4	40	Write a rogram to generate random numbers using the random module.
4	41	Write a program to display current date and time using the datetime module.
4	42	Write a program using user-defined modules.
4	43	Write a program to create a simple package with multiple modules
4	44	Write a program to demonstrate from package import module style of importing.
4	45	Write a program to read a JSON file.
4	46	Write a program in python to read data from users.txt where users.txt is a file of 10 username and password.
4	47	Write a program to create and write text into a file.

4	48	Write a program in python to create a class School and make two objects School1 and School 2 by calling School class.
5	49	Write a program to demonstrate exception handling while reading a file.
5	50	Write a Program to handle divide-by-zero error using try and except.
5	51	Write a program to demonstrate multiple except blocks (e.g., ZeroDivisionError, ValueError).
5	52	Write a program to demonstrate try...except...else construct.
5	53	Write a program to demonstrate try...except...finally construct.
5	54	Write a program to raise a custom exception using raise.
5	55	Write a program to find mean, median, and mode of a list of numbers.
5	56	Program in Python to calculate the highest, lowest, and average marks of students.
5	57	Program in Python to read student data from a CSV file and display it.
5	58	Write a program to analyze sales data (total, average, maximum).
5	59	Write a program to count the occurrence of each character in a string (simple text analysis).
5	60	Write a program to count the frequency of words in a paragraph.(simple natural language processing)