Bharati Vidyapeeth (Deemed to be University), Pune

School of Distance Education

Name of the Assignment Setter:		Mulik Sujata Sampatrao			
Course:	Distance MCA Programme	Class:	MCA	Semester:	v

Subject:

Python Lab Assignments

1. Write a program that prompts the user to input the length and the width of a rectangle and outputs the area and circumference of the rectangle. The formula is

Area = Length x Width

Circumference = $2 \times (Length + Width)$

- **2.** Write a program that prompts the user to enter two integers and display the total on the screen.
- **3.** Write a program that prompts the user to input a Celsius temperature and outputs the equivalent temperature in Fahrenheit. The formula to convert the temperature is: F = 9/5 C + 32 where F is the Fahrenheit temperature and C is the Celsius temperature
- **4.** Write a program which accept principle, rate and time from user and print the simple interest. The formula to calculate simple interest is: simple interest = principle x rate x time / 100
- **6.** Write a Python program that prompts the user to enter number in two variables and swap the contents of the variables.
- 7. Write a program that prompts the user to input a number and display if the number is even or odd.
- 8. Write a python program that prompts the user to input three integers and outputs the largest.
- 9. Write a Python program the marks obtained by a student in 3 different subjects are input by the user. Your program should calculate the average of subjects and display the grade. The student gets a grade as per the following rules:

Average Grade

90-100 A

80-89 B

70-79 C

60-69 D

0-59 F

10. Write a python program that prompts the user to input a number and reverse its digits.

- 11. Write a Python program that accepts a string from user. Your program should create and display a new string where the first and last characters have been exchanged.
- 12. Write a function in python to find the sum of the cube of elements in a list. The list is received as an argument to the function, in turn, the function must return the sum. Write the main function which invokes the above function.
- 13. Write a function find_max that accepts three numbers as arguments and returns the largest number among three. Write another function main, in main() function accept three numbers from user and call find_max.
- 14. Write a function in python to read the content from a text file "poem.txt" line by line and display the same on screen
- 15. A text file named "matter.txt" contains some text, which needs to be displayed such that every next character is separated by a symbol "#". Write a function definition for hash_display() in Python that would display the entire content of the file matter.txt in the desired format.

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