

Master of Operational Research (MOR)

Python Programming Practical List

1. Write a program to enter name and display as “Hello, Name”.
2. Write a menu driven program to enter two numbers and print the arithmetic operations like
 - a. + b. – c. * d. / e. // f. %.
3. To compute the roots of a quadratic equation.
4. Write a menu driven Program to reverse the entered numbers and print the sum of digits entered.
5. Write a menu driven Program to enter the number and print whether the number is
 - a. odd or even
 - b. prime.
6. Program to find maximum out of entered 3 numbers
7. Write a program to display ASCII code of a character and vice versa.
8. Write a Program to check if the entered number is Armstrong or not.
9. Write a Program to find factorial of the entered number using recursion.
10. Write a Program to enter the number of terms and to print the Fibonacci Series.
11. Write a Program to enter the numbers and to print greatest number using loop.
12. Write a Program to enter the string and to check if it's palindrome or not using loop.
13. Write a Program to enter the 5 subjects numbers and print the grades A/B/C/D/E.
14. Write a program in python language to display the given pattern:

```

          5
        4 5
      3 4 5
    2 3 4 5
  1 2 3 4 5

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15. Write a python function sin(x,n) to calculate the value of sin(x) using its Taylor series expansion up to n terms.

$$\sin(x) = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \dots,$$

16. Write a Program to determine EOQ using various inventory models.
17. Write a Program to determine different characteristics using various Queuing models
18. Write a Program to implement Inheritance. Create a class Employee inherit two classes Manager and Clerk from Employee.
19. Program to fit Poisson distribution on a given data.
20. Write a program to implement linear regression using python.
21. Write a program to perform read and write operation with .csv file.
22. Write a Program to enter multiple values-based data in multiple columns/rows and show that data in python using DataFrames and pandas.
23. WAP in python to perform various statistical measures using pandas.
24. Write a program to plot a bar chart in python to display the result of a school for five consecutive years.
25. Write a program in python to plot a graph for the function $y = x^2$
26. Write a program in python to plot a pie chart on consumption of water in daily life.

Note: -

It is advised that students should install various libraries (NumPy, Pandas, Matplotlib, etc.) in their system.