

## INDEX

- 1 Write a function that receives two string arguments and checks whether they are same -length strings (returns True in this case otherwise False).
- 2) Write a function that takes a number n and then returns a randomly generated number having exactly n digits (not starting with zero) e.g., if n is 2 then function can randomly return a number 10-99 but 07, 02 etc. are not valid two digit numbers.
- 3) Write a program that generates a series using a function which takes first and last values of the series and then generates four terms that are equidistant e.g., if two numbers passed are 1 and 7 then function returns 1 3 5 7.
- 4) Write a function namely nth Root( ) that receives two parameters x and n and returns nth root of x i.e.,  $x^{(1/n)}$ . The default value of n is 2.
- 5) Write a program to calculate the factorial of an integer using recursion.
- 6) Write a Program to enter the number of terms and to print the Fibonacci Series.
- 7) Write a Program in Python Using user defined function to find: a. Perimeter of a rectangle b. circumference of a circle
- 8) Write a python code to find the size of the file in bytes, the number of lines, and number of words and number of characters.
- 9) Write a program to create a library in python and import it in a program.
- 10) Write a program to calculate EMI for a loan using numpy.
- 11) Write a program for bubble sort.

- 12) Write a program to plot a bar chart in python to display the result of a school for five consecutive years.
- 13) Write a program in python to plot a graph for the function  $y = x^2$ .
- 14) Write a program to connect Python with MySQL using database connectivity and perform the following operations on data in database: Fetch, Update and delete the data.
- 15) Queries for Aggregate functions- SUM( ), AVG( ), MIN( ), MAX( ), COUNT( )
- 16) Queries using DISTINCT, BETWEEN, IN, LIKE, IS NULL, ORDER BY, GROUP BY, HAVING
  - Display the name of departments. Each department should be displayed once.
  - Find the name and salary of those employees whose salary is between 35000 and 40000.
  - Find the name of those employees who live in guwahati, surat or jaipur city.
  - Display the name of those employees whose name starts with 'M'.
  - List the name of employees not assigned to any department.
  - Display the list of employees in descending order of employee code.
  - Find the average salary at each department.
- 17) Write a program to open a webpage using urllib library.
- 18) Write a menu based program to perform the operation on stack in python.
- 19) Find the min, max, sum, and average of the marks in as student marks table.
- 20) Write a SQL query to order the (Student\_ID, marks) table in descending order of the marks.