

PYTHON

Lab Assignment

Simple program in python

1. Write a program to print a sample text as shown,

```
This is Python
and hope you are a programmer.
Who wants to learn me?
```

2. Write a program to get the following output?

```
w      w
w w w
w
w w w
w      w
```

3. How to write multiple statements on a single line?
4. Write a program to provide following output : `hello'hi'bye'"why'`

Input and output operation

5. Write a program to print absolute value of a given number.
6. Write a program to find the type of the given input.
7. Write a program to take input by using input () function only and convert it into cube and print the output.

Operator

8. A man has taken a debt of 200 R.S. Write a program to find simple interest after 2 years with rate of interest=3% and using input () calculate the Interest ?
9. Consider a=5 what is the output of the following `a<<3`, `a>>3`, `a>>2` and `a<<2`.

Decision Making Structure

10. Write a program to find maximum of three numbers.
11. Write a program to check whether input provided is odd or even.
12. write a program to check whether a year is leap year or not
13. Gradation System:
If number is greater or equal to 80: got grade A
If number is greater or equal to 60: got grade B
If number is greater or equal to 40: got grade C
Otherwise Fail

Loop Statement

14. Write a program to find whether given number is a prime number or not.
15. Write a program to find whether a given number is palindrome or not.
Example: Input: 121
 Output: 121 is a Palindrome number
16. Program to calculate the sum of first n natural numbers.
17. Print the following pattern
01234
0123
012
01
0

String Problems

18. Write a program to find whether given string is a palindrome or not.
Example: Input: madam
 Output: Palindrome
19. Write a program to sort word in alphabetic order.
Example: Input: My name is Ram
 Output: is My name Ram
20. Show the following string method in python with
examplecapitalize(),upper(),lower(),count(),index(),endswith(),expandtabs(tabsize),find(),isalnum
(),isalpha (),isdigit (), title ()

Tuple list Dictionary

21. Consider the following,
animals = { 'a':['art'], 'b': ['balloon'], 'c': ['coat'],'d'=['den','dog','deer']}
write a function to find the key that has maximum values

Function in python

22. Write a function for print hello world.
23. Write a function for check a number is odd or even.
24. Write a function to calculate the sum of first n natural numbers.
25. Python program to display the multiplication table through function.

File reading and writing

26. Write a program to read from a file and write to a file simultaneously.
27. Write a program to display the content of a file on the screen.
28. Write a program to create a directory with name pyt and rename it to python and delete it.

Exception

29. Write a program to find reciprocal of x and it shouldn't show any error for any input value.
30. Write a program that write anything within a text file and also handle the I/O error

Object oriented programming

31. Write a program of account class which has the functionalities like checking, withdrawing, depositing and transferring the balance using object oriented approach.