

PYTHON PROGRAMMING LAB QUESTIONS

YEAR 1 : SEM 1

1. Addition of two numbers, give default values
2. Addition of two numbers, use input function values, try with all types of data
3. Get basic student details using input function and display them
4. demonstrate the use of type() ord() chr() funtions
5. Demonstrate various formatting options for stings and numbers
6. Write a program to compute arithmetic operations taking input from the user and display the result.
7. Write a program to demonstrate bitwise, relational operators and logical operators.
8. Write a program to swap two numbers using a temporary variable.
9. Write a program to swap two numbers without using a temporary variable. (Both Ways)
10. Write a program to calculate area of triangle, rectangle, circle and square
11. Write a program to convert celcius to Fahrenheit and vice versa.
12. Write a program to find out total amount in a bag based on the number of coins present in bag. (Bag contains all type of coins Re1, Re2, Re5, Re10)
13. Write a program to calculate the amount of the product purchased with given values(Rate, NoOfUnits, Discount percentage, Tax percentage)
Example : Rate rs 1000
NoofUnits 5
Discount 10%
Tax 5%
14. Write a program to check whether the given number is even or odd

15. Write a program to find out largest of two numbers
16. Write a program to find the largest element among three numbers (multi-way if-elif- else statements.).
17. Write a program to check if the person is eligible to vote or not. If not display number of years he need to wait for voting.
18. Write a program to find out whether the given year is leap year or not.
19. A company decided to give Diwali bonus to its employees. A 5% bonus is given to Non-Technical(NT) staff and 10% bonus is given to Technical Staff(T). Write a program to get the details from user (salary , type of staff NT or T) . Depending upon the type of staff calculate the bonus. Display 1. Salary 2. Bonus 3. Total Salary(salary+bonus)
20. Write a program to print n numbers using while loop.
21. Write a program to find out sum of n numbers using while loop
22. Write a program to find sum and average of numbers between m and n (where $m < n$ and calculate sum excluding both m and n) . If $m > n$ print “Invalid”.
23. Write a program to check if the given three digit number is armstrong number or not .
24. Write a program to find out sum of individual digits in a given number.
25. Write a program to read user input until -1 is encountered.
if user enters -1 , stop the loop
if user enters any other number , count the positive,negative and zeros separately and continue the loop.
26. Write a for loop to generate the sequence 1, 8, 27, 64..... upto n numbers. Take n value from user.
27. Write a for loop to print the n table upto $n * 20 = 20n$

28. Write a for loop to generate the sequence 1 1 3 6 10 15 21
..... upto n integers
29. Write a for loop to generate sequence upto 20 numbers
30. Write a function to multiply two numbers.
31. Write a user defined function to check whether the given
integer is prime or not
32. write a user defined function to calculate $n*n$ return the result
to main code .
33. Write a user defined function to calculate simple interest
using p,n,r,values
34. write a function to calculate volume of the cube
35. write a function to convert time into minutes

def convert(hours,minutes): # function header

convert(7, 30) # function call statement