

National College of Computer Studies (NCCS)

BIM First Semester: Structure programming lab assignment 1

1. Write a program that can calculate area and circumference of the circle. πr^2 and $2\pi r$
2. Write a program to calculate volume of a box. Accept height, width and length from user. (volume= length*breadth*height).
3. Write a program that accept two numbers and calculates their addition, subtraction, multiplication, division and modulus. And display all the result on screen.
4. Write a program to accept amount from user and add 5% tax on it and display the total amount.(if user enter 100 then add 5% and display 105 as a result).
5. Write a program that accept dollar from user and calculate the equivalent Nepalese rupees and display the result.
6. Write a program that accepts three number and display the average.
7. Write a program that accept the selling price of an item in Supermarket in Indian Currency and display the selling price of the item in Nepali currency.
8. Read a character data and display its ASCII value.
9. Read a 3 digit number and find the sum of the three digits.
10. Read weight in gram and display how many kilogram and gram are there.
11. Read two variables and swap the data between two variables.
12. Write a program (WAP) to calculate the square root of the number inputted by user.
13. Write a program that receive a number from user, convert it into degree and calculate its correspondent sin, cos and tan value. **[degree=number*(pi/180)]**
14. WAP to convert temperature in centigrade into Fahrenheit. **[note: $F=(C*1.8)+32$ and $C=(F-32)/1.8$]**

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15. WAP to convert meter into centimeter.
16. WAP to convert hours into minute, minute into second.
17. WAP to convert Rupees into Dollars.
18. WAP to find square and cube of the given number.
19. WAP to read base and height of a triangle and calculate the area of it. $[\text{area} = 1/2 * b * h]$
20. WAP to read three sides of a triangle and calculate the area. $[\text{area} = \sqrt{s(s-a)(s-b)(s-c)}]$ where **a, b and c are the sides of a triangle**. $s = (a+b+c)/2$
21. WAP to ask number of quantities and price per quantity then find total price.
22. WAP to read mark price of radio and find discount which is 30% of mark price then find the actual selling price of radio.
23. WAP to read basic salary then find tax and allowance, tax is 20% of basic salary and allowance is 40% of basic salary. Also find out net salary.
24. WAP to read the age of three people and then find average age.
25. WAP that asks the student marks obtained in 5 subjects. Display the marks as well as total marks obtained and percentage assuming full marks is 100.

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