

(Lab_04: Tasks)

Task 01:

Write a program in which you can ask the user to input two numbers and perform some mathematical operations like, division, multiplication, addition, subtraction and print the result on the screen.

Task 02:

Write a program in which you ask the user to input two numbers and perform ++, --, operations on any one entered number and quotient and modulus operations on both. Print the result on screen.

Task 03:

At very first week you make friends and make study plans for scoring good gpa in first semester. Consider you are three friends like Ali, Ahmed and Zeeshan. Ali says that I'll be studying 4 hours for 5 days a week, Ahmed says that I'll study 5 hours for 4 days a week while Zeeshan says that I'll study 3 hours per day a week. Find the average study hours plan each of your friend for whole month.

Task 04:

You are planning your vacation and you considering two different sites. You would like to go to the one that will be more expensive for the total trip including gas, hotel room for six nights, and meals for seven days. Write a program which can help you that Which of the site would be the more expensive?

Task 05:

We spent three hours on each Thursday in CSE141 lab. Write a program which returns total number of hours, minutes and seconds spent throughout the semester. Consider the number of week as 17 only. Make sure that number of weeks in semester should not be changed.

Task 06:

The cafeteria owner has notes of 1,2,5 10, 50 and 100. You buy a cup of tea and give him a note of 5 hundred. If the cup of tea is entered through the keyboard and he is about to give you the remaining money. Find the total number of currency notes the cashier will have to give you.

Task 07:

State the order of evaluation of the operators in each of the following C statements and show the value of x after each statement is performed.

- a) $x = 7 + 3 * (6 / 2) - 1;$
- b) $x = 2 \% 2 + 2 * (2 - 2) / 2;$
- c) $\text{int } x = (3 * (9 * (3 + (9 - 3 / (3)))));$

Task 08:

Write a program in which you ask the user two input numbers and perform the following operations on user input.

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- a) Number1 > Number2;
- b) Number1 < Number2
- c) Number1 == Number2
- d) Number1 <= Number2

Task 09:

FAST-NU has assigned a budget of 40 million pkr for new academic building construction. In the architecture of new block, there are four floors, on each floor there are 10 rooms. The area of each room is 44 square meter. Based on the inputs and outputs, convert the area of each room in square feet. Also calculate the area of 10 rooms at each floor and of all rooms in square feet. If one room costs 0.5 Million pkr then how much total cost will be for all the building rooms. Is the assigned budget being enough for new building room construction, also mention the extra amount if required or saving amount if there is.

Task 10:

- a) If a four-digit number is input through the keyboard, write a program to calculate the sum of its digits.
(Hint: Use the modulus operator '%')
- b) write a program to obtain the sum of the first and last digit of this number.
- c) Find the value of z with the help of C program by using math.h library:

$$z = (\text{sqrt}(a) + \text{pow}(a,b) + \text{cbrt}(a))$$

Consider the value of a = 4, and b = 8;