॥वसुधैव कुटुम्बकम॥

SYMBIOSIS INSTITUTE OF TECHNOLOGY, PUNE

Constituent of Symbiosis International (Deemed University), Pune

Assignment No.: 03	
Course Name	Programming in C Lab
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Branch	CSE
Class	C-1
Academic Year & Semester	2023-2024 & Semester 2
Date of Performance	02/02/2024
Assignment Title (Full):	Write a C Program to relate two integers using =, > or < using nested ifs & multiple ifs.

Theory: (Note: According to the assignment title, please write the background information as an introduction, then write the steps/logic/process/algorithm of the C program in the Journal Notebook, and add its screenshot in the below theory response.)

Theory Response:

1. Accept two integers (num1 and num2) as user input.
2. Use the ternary conditional operator, switch case statement and if-else conditional statements to compare the numbers and print the result:
    - If num1 equals num2, print "Both numbers are equal."
    - If num1 is greater than num2, print "num1 is greater than num2."
    - If num2 is greater than num1, print "num2 is greater than num1."

Output: (Note: Execute the C program as per the assignment title, take an input code and output result screenshot with the date and time from your computer, and add its screenshot in the below output response.)

Output Response:

```c
#include <stdio.h>

int main() {
    int num1, num2;
    printf("Enter the first number: ");
    scanf("%d", &num1);
    printf("Enter the second number: ");
    scanf("%d", &num2);

    (num1 == num2)?printf("Both numbers are equal.\n"):(num1 > num2)?printf("%d is \
greater than %d.\n", num1, num2):printf("%d is greater than %d.\n", num2, num1);
/*
   switch (num1 > num2)
   {
   case 1:
    printf("%d is greater than %d.\n",num1,num2);
    break;
   case 0:
    switch (num1<num2)
    {
    case 1:
        printf("%d is greater than %d.\n",num2,num1);
        break;

    case 0:
        printf("Both numbers are equal.\n");
        break;
    }
   }
*/
/*
    if (num1 == num2) {
        printf("Both numbers are equal.\n");
    }
    else if (num1 > num2) {
        printf("%d is greater than %d.\n",num1,num2);
    }
    else {
        printf("%d is greater than %d.\n",num2,num1);
    }
*/

    return 0;
}
```

```
Enter the first number: 12
Enter the second number: 15
15 is greater than 12.
(base) fahee@Faheems-MacBook-Pro Programming_in_C %

Enter the first number: 15
Enter the second number: 9
15 is greater than 9.
(base) fahee@Faheems-MacBook-Pro Programming_in_C %
```

```
Enter the first number: 12
Enter the second number: 12
Both numbers are equal.
(base) fahee@Faheems-MacBook-Pro Programming_in_C %
```

Conclusion: (Note: Write the key findings or outcome from this assignment, enlist their potential real-world applications in Journal Notebook, and add its screenshot in the below conclusion response.)

Conclusion Response:

The C code compares two numbers using a ternary conditional operator, determining whether they are equal or which one is greater. The commented-out sections include alternative implementations using switch statements and if-else conditions, showcasing different ways to achieve the same result.

Please note that assignment content can be readable.

Faculty Name:

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