

Test 4 || 23 Dec 2024

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Que 1: Write a program to print factors of number in given range.

Eg. Range 10 to 15

10 = 1, 2, 5, 10

11 = 1, 11

12 = 1, 2, 3, 4, 6, 12

13 = 1, 13

14 = 1, 2, 7, 14

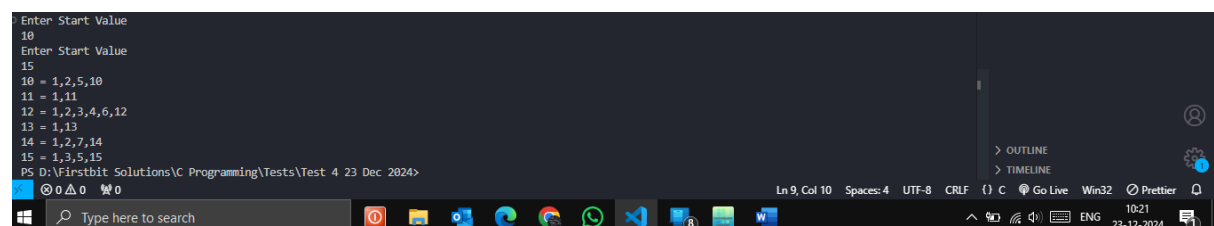
15 = 1, 3, 5, 15

```
#include<stdio.h>

void printFactor(int start, int end){
    for (int i = start; i <= end; i++)
    {
        int num = i;
        printf("%d = ", num);
        for (int j = 1; j <= num/2; j++)
        {
            if(num % j==0) printf("%d, ", j);
        }
        printf("%d \n", num);
    }
}

int main(){
    int start, end;
    printf("Enter Start Value\n");
    scanf("%d", &start);
    printf("Enter End Value\n");
    scanf("%d", &end);

    printFactor(start, end);
    return 0;
}
```



The screenshot shows a Windows terminal window with the following output:

```
Enter Start Value
10
Enter End Value
15
10 = 1,2,5,10
11 = 1,11
12 = 1,2,3,4,6,12
13 = 1,13
14 = 1,2,7,14
15 = 1,3,5,15
PS D:\Firstbit Solutions\C Programming\Tests\Test 4 23 Dec 2024>
```

The terminal window also shows the Windows taskbar at the bottom with various application icons and system tray icons.

Que 2: Write a program to find power of any number.

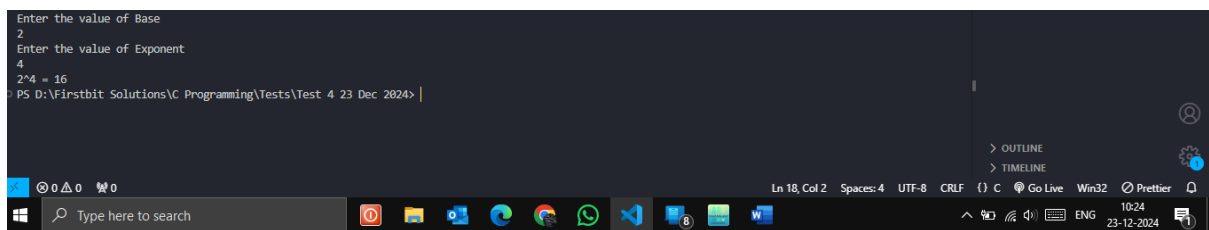
Eg. $2^4 = 16$.

```
#include<stdio.h>

int findPower(int base, int exponent){
    int pow = 1;
    while(exponent-->0) pow *= base;
    return pow;
}

int main(){
    int base, exponent;
    printf("Enter the value of Base\n");
    scanf("%d", &base);
    printf("Enter the value of Exponent\n");
    scanf("%d", &exponent);

    printf("%d^%d = %d", base, exponent, findPower(base, exponent));
    return 0;
}
```



```
Enter the value of Base
2
Enter the value of Exponent
4
2^4 = 16
PS D:\Firstbit Solutions\C Programming\Tests\Test 4 23 Dec 2024>
```

The screenshot shows a Windows terminal window with a dark background. The terminal displays the output of a C program. It prompts the user to enter the base and exponent, and then shows the result of the power calculation. The base is 2 and the exponent is 4, resulting in 2^4 = 16. The terminal window has a title bar and a taskbar at the bottom. The taskbar shows various application icons, including the Start button, search bar, and several open applications like File Explorer, Edge, and VS Code. The system tray at the bottom right shows the date and time as 10:24 on 23-12-2024.