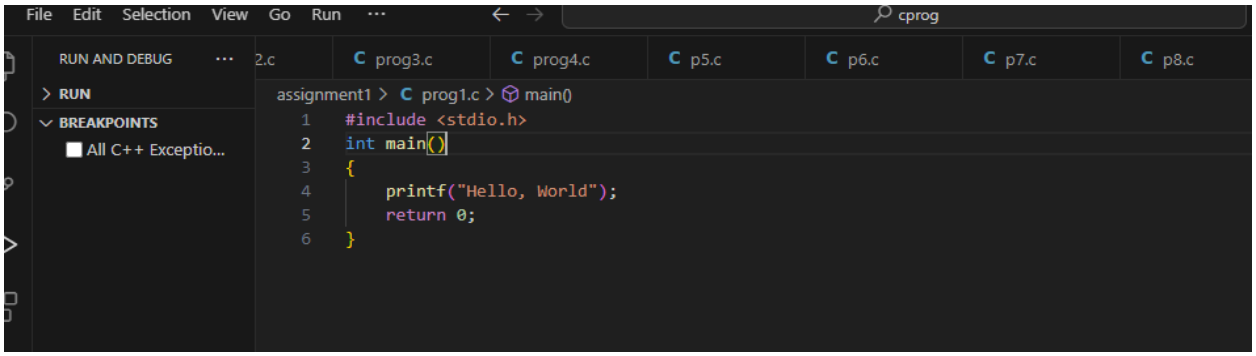
PG - DAC Sept
Logical Building & Problem Solving
Assignment - 1(Date:08/09/2023)
Name : Vrushali Sonawane
Roll NO.: 230950320086

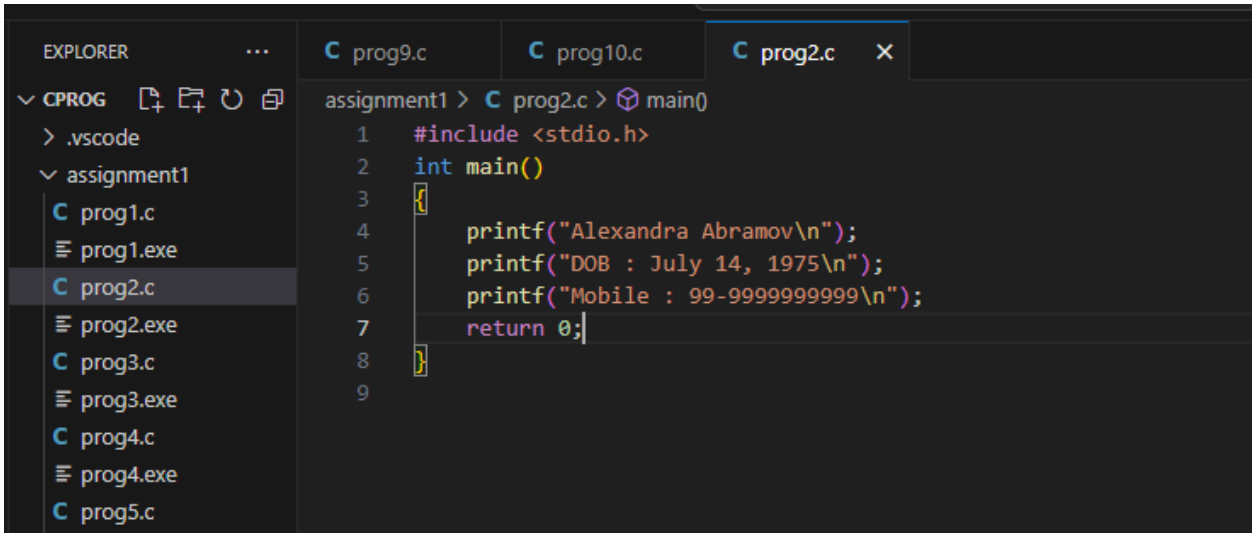
---

1. Write a program that prints "Hello, World!" to the console.

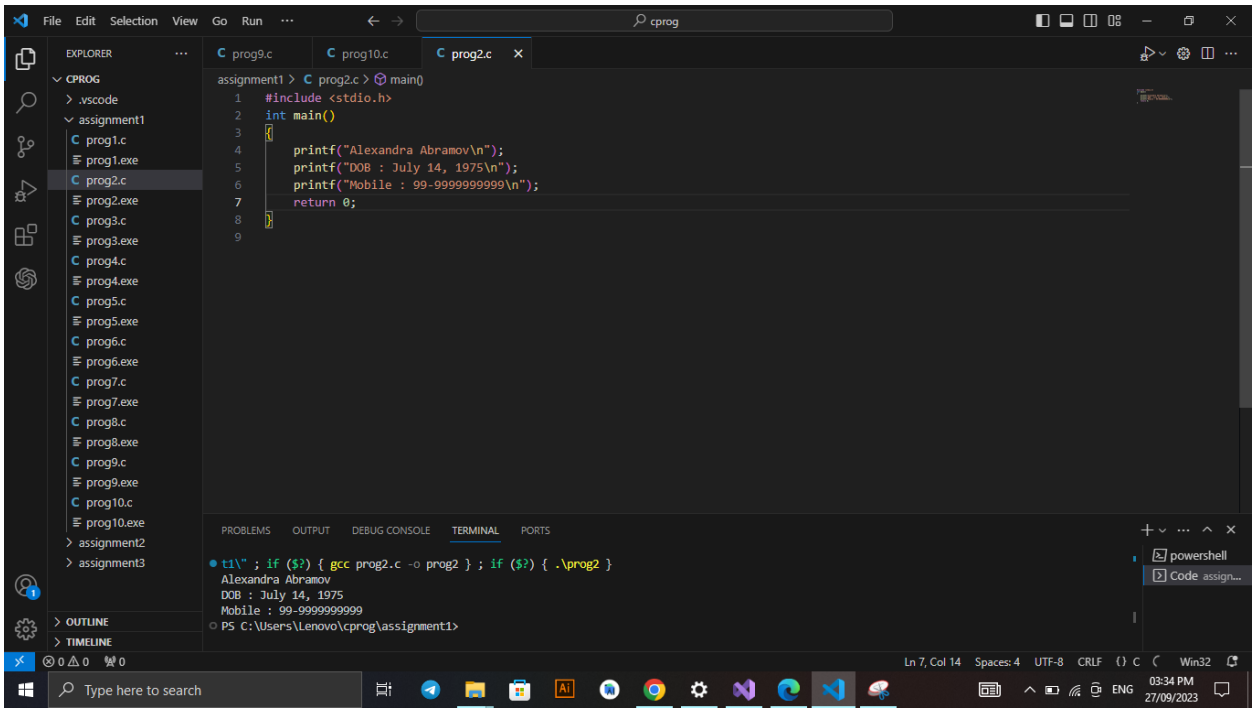


Output:

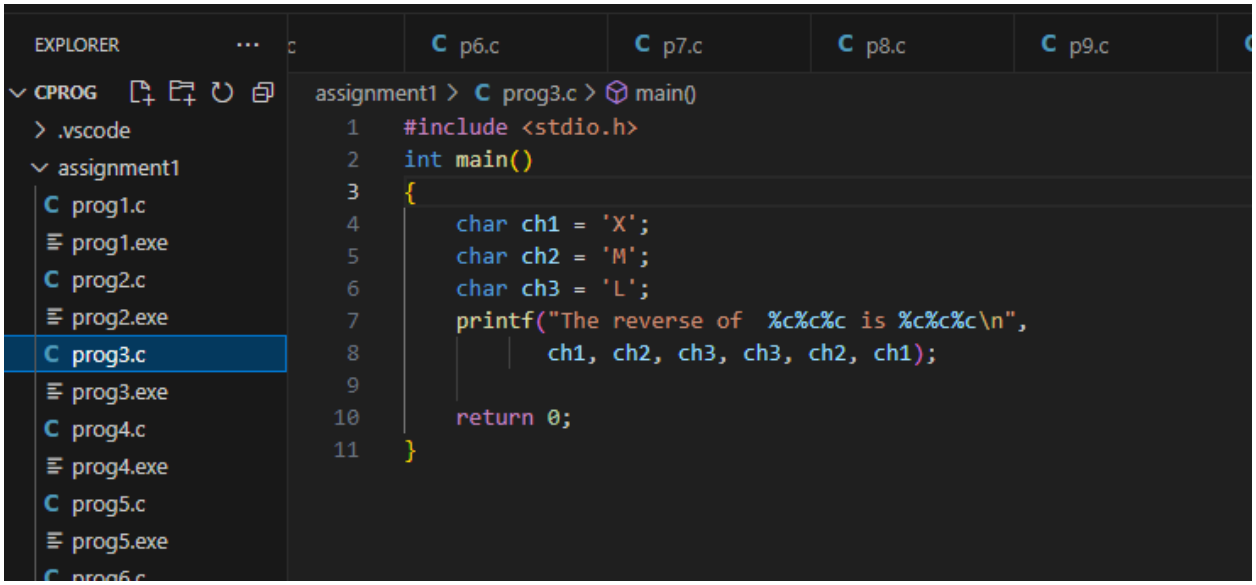
2. Write a C program to print your name, date of birth, and mobile number.
Expected Output: Name : Alexandra Abramov DOB : July 14, 1975 Mobile : 99-9999999999



Output:

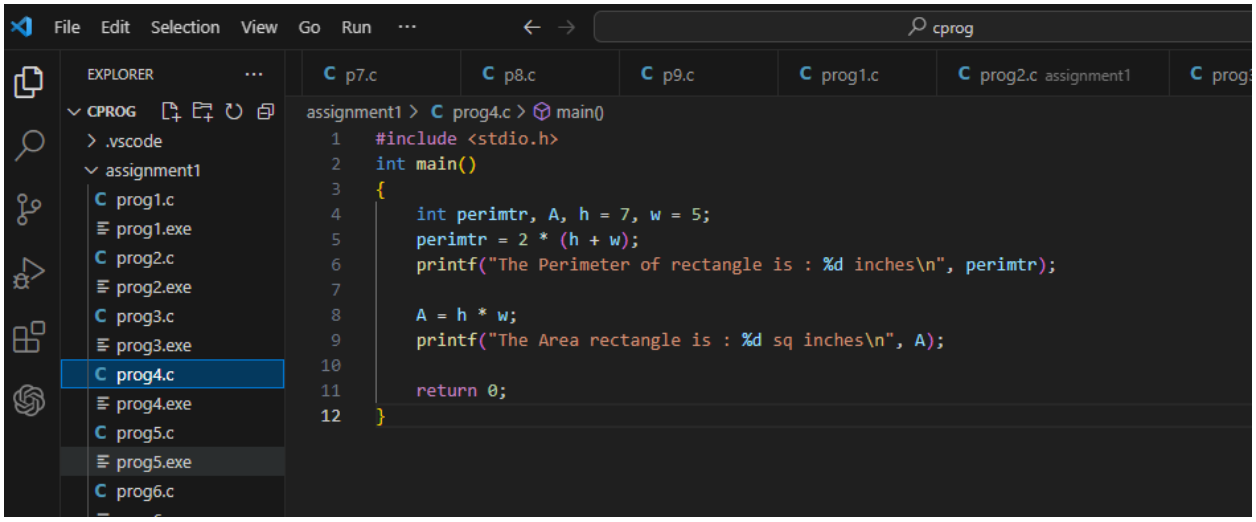


3. Write a C program to print the following characters in reverse. Test Characters: 'X', 'M', 'L' Expected Output: The reverse of XML is LMX.



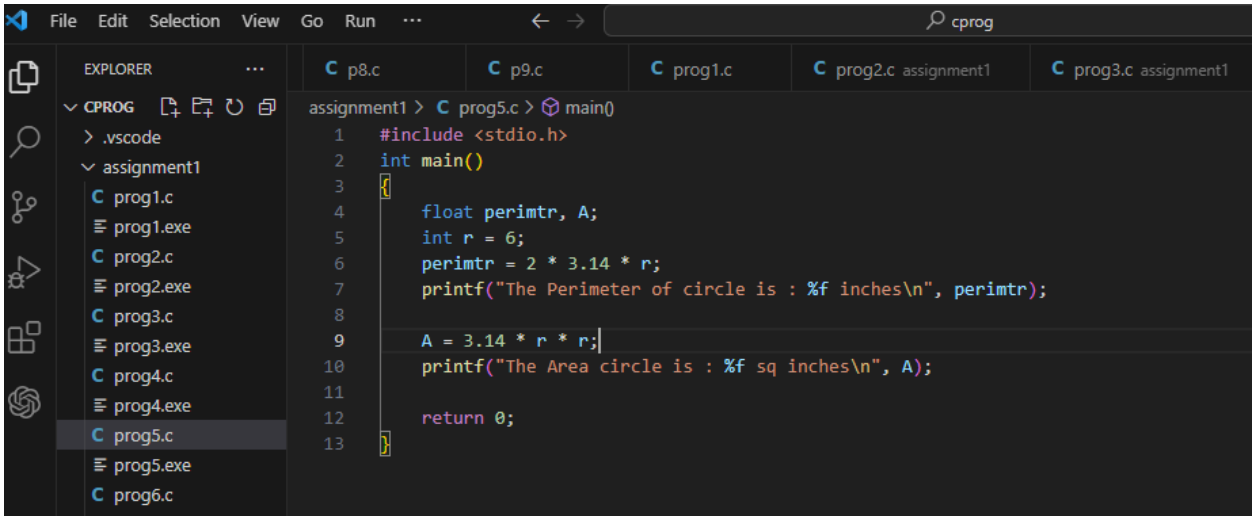
Output:

4. Write a C program to compute the perimeter and area of a rectangle with a height of 7 inches and width of 5 inches. Expected Output: Perimeter of the rectangle = 24 inches Area of the rectangle = 35 square inches.

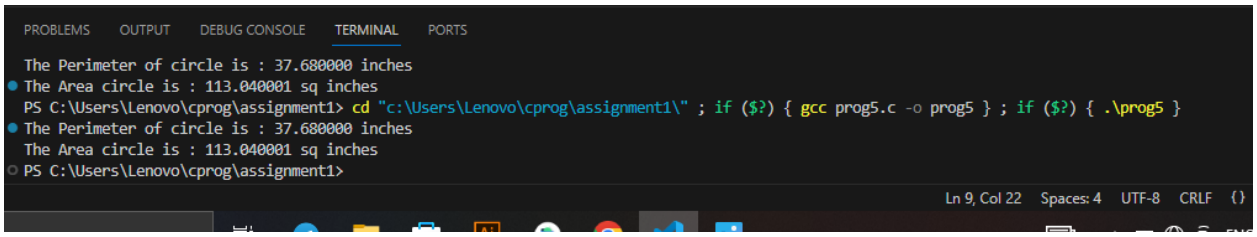


Output:

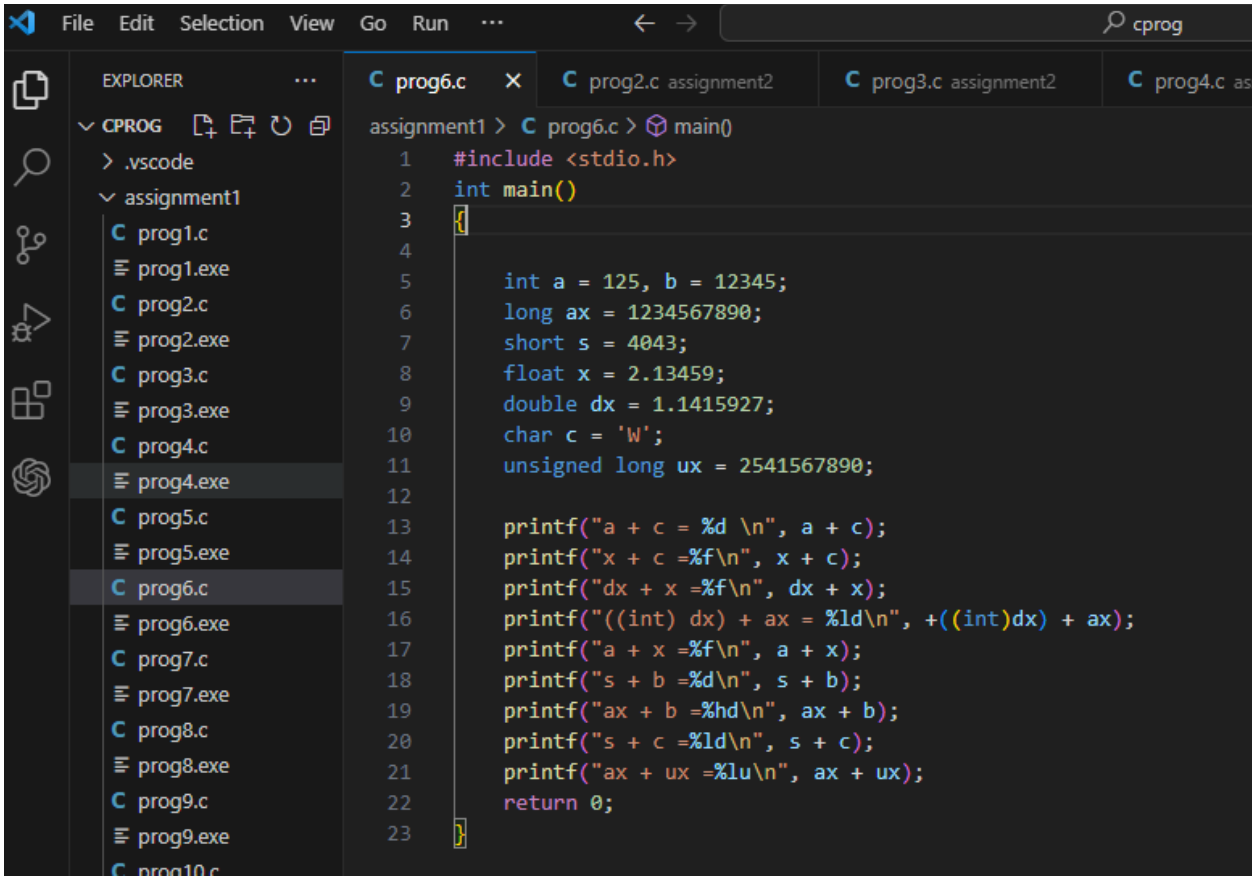
5. Write a C program to compute the perimeter and area of a circle with a given radius. Expected Output: Perimeter of the Circle = 37.680000 inches Area of the Circle = 113.040001 square inches



Output:

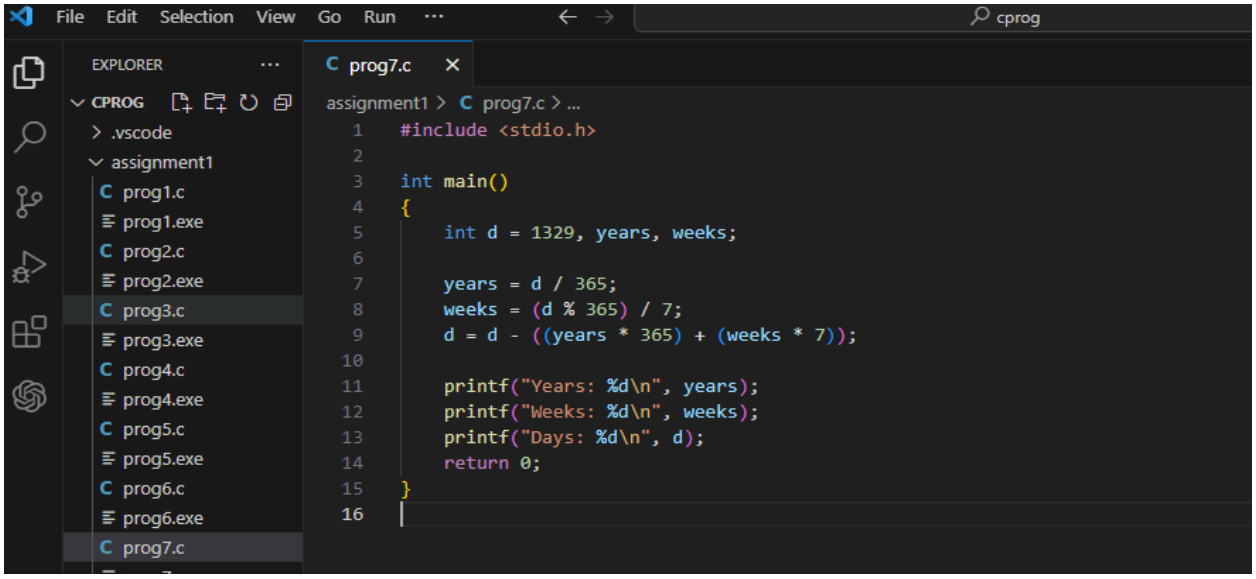


6. Write a C program to display multiple variables. Sample Variables : a+ c, x + c,dx + x, ((int) dx) + ax, a + x, s + b, ax + b, s + c, ax + c, ax + ux Declaration : int a = 125, b = 12345; long ax = 1234567890; short s = 4043; float x = 2.13459; double dx = 1.1415927; char c = 'W'; unsigned long ux = 2541567890;



Output:

7. Write a C program to convert specified days into years, weeks and days. Note: Ignore leap year. Test Data : Number of days : 1329 Expected Output : Years: 3 Weeks: 33 Days: 3



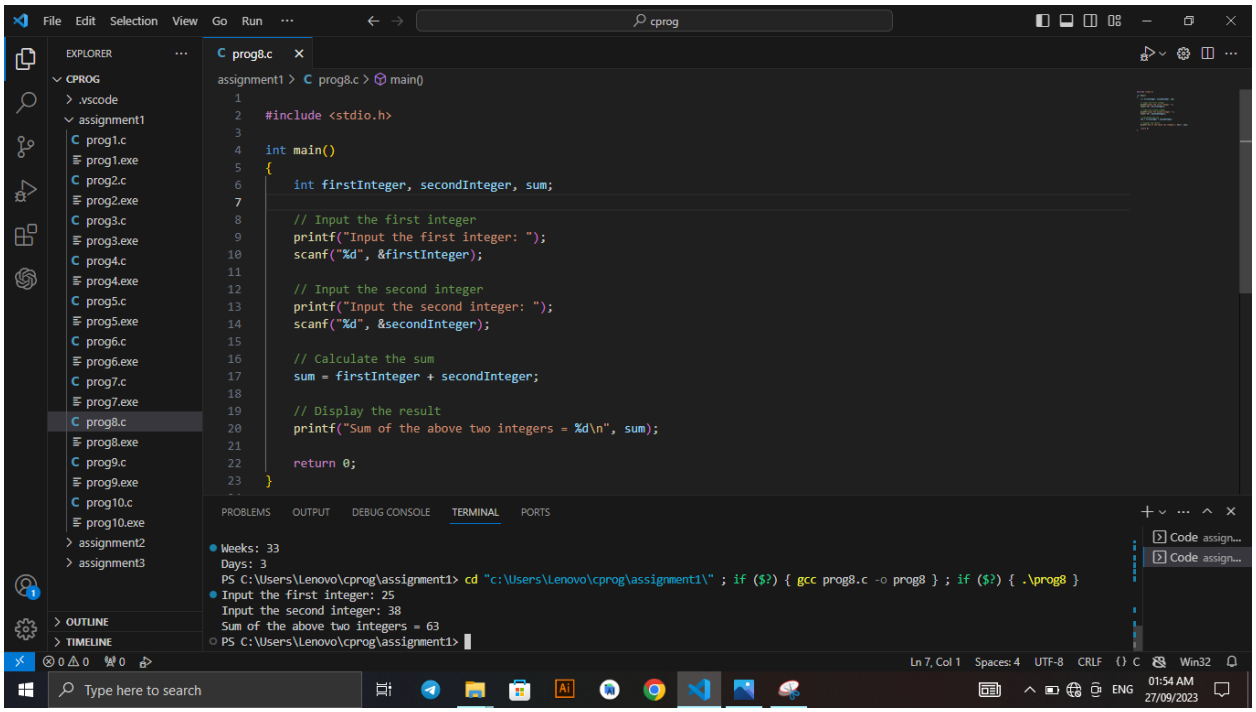
Output:

8. Write a C program that accepts two integers from the user and calculates the sum of the two integers. Test Data : Input the first integer: 25 Input the second integer: 38 Expected Output: Sum of the above two integers = 63

assignment1 > C prog8.c > main()

```c
#include <stdio.h>

int main()
{
    int firstInteger, secondInteger, sum;

    // Input the first integer
    printf("Input the first integer: ");
    scanf("%d", &firstInteger);

    // Input the second integer
    printf("Input the second integer: ");
    scanf("%d", &secondInteger);

    // Calculate the sum
    sum = firstInteger + secondInteger;

    // Display the result
    printf("Sum of the above two integers = %d\n", sum);

    return 0;
}
```

Output:

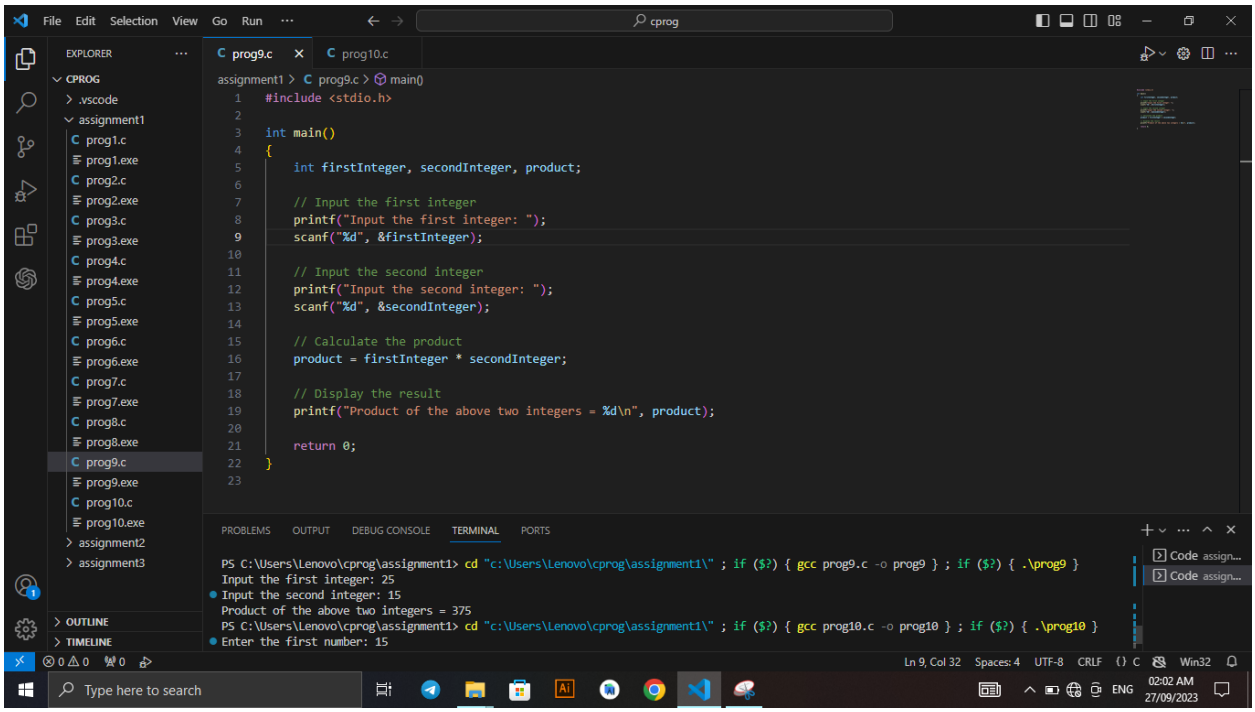


9. Write a C program that accepts two integers from the user and calculates the product of the two integers. Test Data : Input the first integer: 25 Input the second integer: 15 Expected Output: Product of the above two integers = 375

assignment1 > C prog9.c > main()

```c
#include <stdio.h>

int main()
{
    int firstInteger, secondInteger, product;

    // Input the first integer
    printf("Input the first integer: ");
    scanf("%d", &firstInteger);

    // Input the second integer
    printf("Input the second integer: ");
    scanf("%d", &secondInteger);

    // Calculate the product
    product = firstInteger * secondInteger;

    // Display the result
    printf("Product of the above two integers = %d\n", product);

    return 0;
}

```

Output:

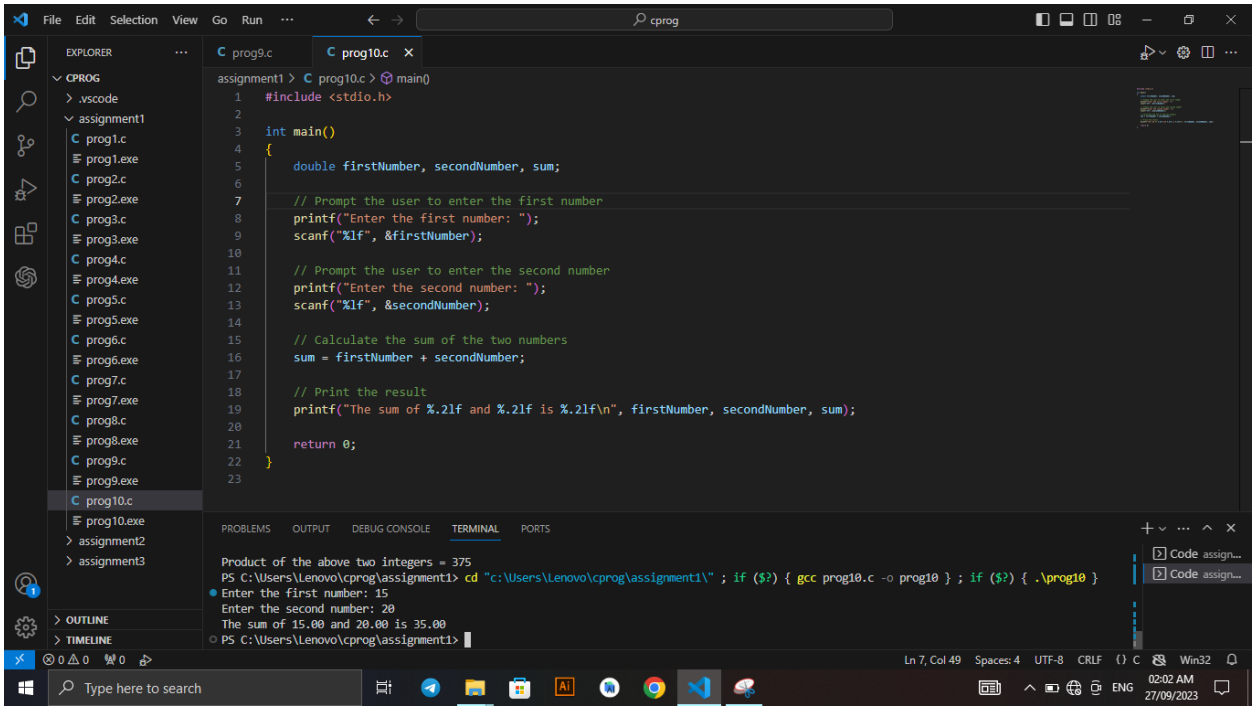


10. Write a program that prompts the user to enter two numbers, adds them together, and prints the result to the console.

assignment1 > C prog10.c > main()

```c
#include <stdio.h>

int main()
{
    double firstNumber, secondNumber, sum;

    // Prompt the user to enter the first number
    printf("Enter the first number: ");
    scanf("%lf", &firstNumber);

    // Prompt the user to enter the second number
    printf("Enter the second number: ");
    scanf("%lf", &secondNumber);

    // Calculate the sum of the two numbers
    sum = firstNumber + secondNumber;

    // Print the result
    printf("The sum of %.2lf and %.2lf is %.2lf\n", firstNumber, secondNumber, sum);

    return 0;
}

```

Output:


File Edit Selection View Go Run
cprog
EXPLORER
CPROG
.vscode
assignment1
prog1.c
prog1.exe
prog2.c
prog2.exe
prog3.c
prog3.exe
prog4.c
prog4.exe
prog5.c
prog5.exe
prog6.c
prog6.exe
prog7.c
prog7.exe
prog8.c
prog8.exe
prog9.c
prog9.exe
prog10.c
prog10.exe
assignment2
assignment3
OUTLINE
TIMELINE
prog9.c
prog10.c
assignment1 > prog10.c > main()
#include <stdio.h>
int main()
{
double firstNumber, secondNumber, sum;
// Prompt the user to enter the first number
printf("Enter the first number: ");
scanf("%lf", &firstNumber);
// Prompt the user to enter the second number
printf("Enter the second number: ");
scanf("%lf", &secondNumber);
// Calculate the sum of the two numbers
sum = firstNumber + secondNumber;
// Print the result
printf("The sum of %.2lf and %.2lf is %.2lf\n", firstNumber, secondNumber, sum);
return 0;
}
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS
Product of the above two integers = 375
PS C:\Users\Lenovo\cprog\assignment1> cd "c:\Users\Lenovo\cprog\assignment1\" ; if ($?) { gcc prog10.c -o prog10 } ; if ($?) { .\prog10 }
Enter the first number: 15
Enter the second number: 20
The sum of 15.00 and 20.00 is 35.00
PS C:\Users\Lenovo\cprog\assignment1>
Code assign...
Code assign...
Ln 7, Col 49 Spaces: 4 UTF-8 CRLF C Win32
Type here to search
ENG
02:02 AM
27/09/2023