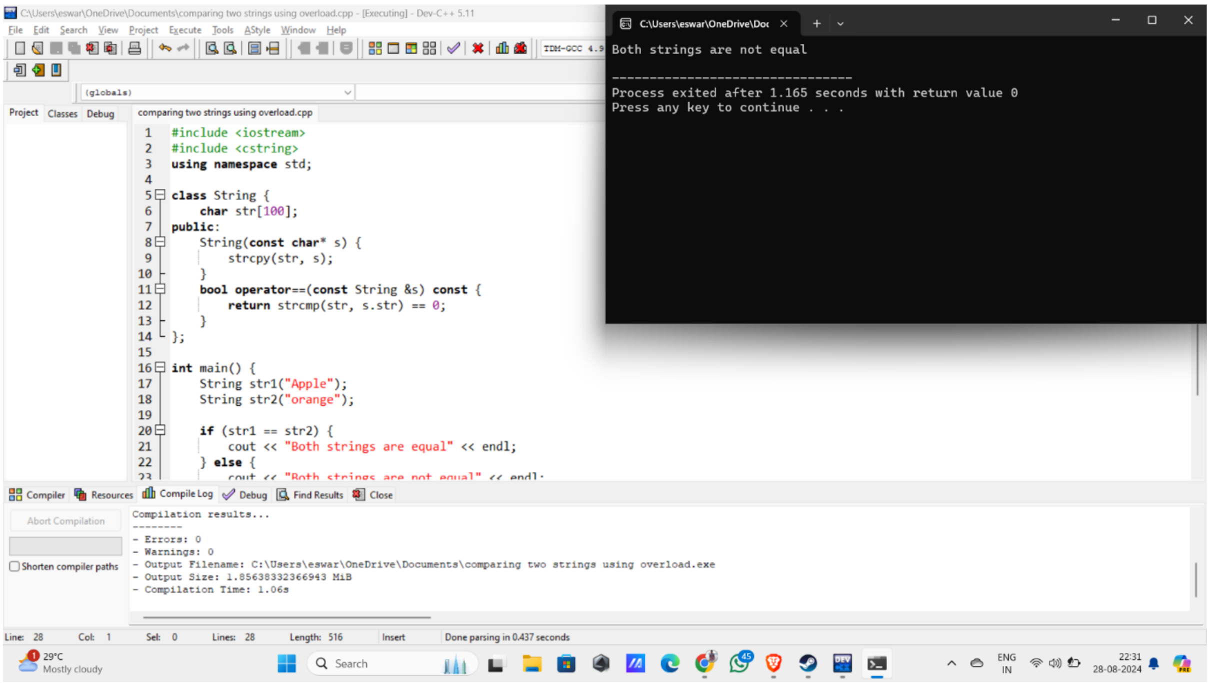
1.Comparision of strings using overload


C:\Users\eswar\OneDrive\Documents\comparing two strings using overload.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
comparing two strings using overload.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
29°C
Mostly cloudy
Search
ENG
IN
22:31
28-08-2024

```cpp
#include <iostream>
#include <cstring>
using namespace std;

class String {
    char str[100];
public:
    String(const char* s) {
        strcpy(str, s);
    }
    bool operator==(const String &s) const {
        return strcmp(str, s.str) == 0;
    }
};

int main() {
    String str1("Apple");
    String str2("orange");

    if (str1 == str2) {
        cout << "Both strings are equal" << endl;
    } else {
        cout << "Both strings are not equal" << endl;
```

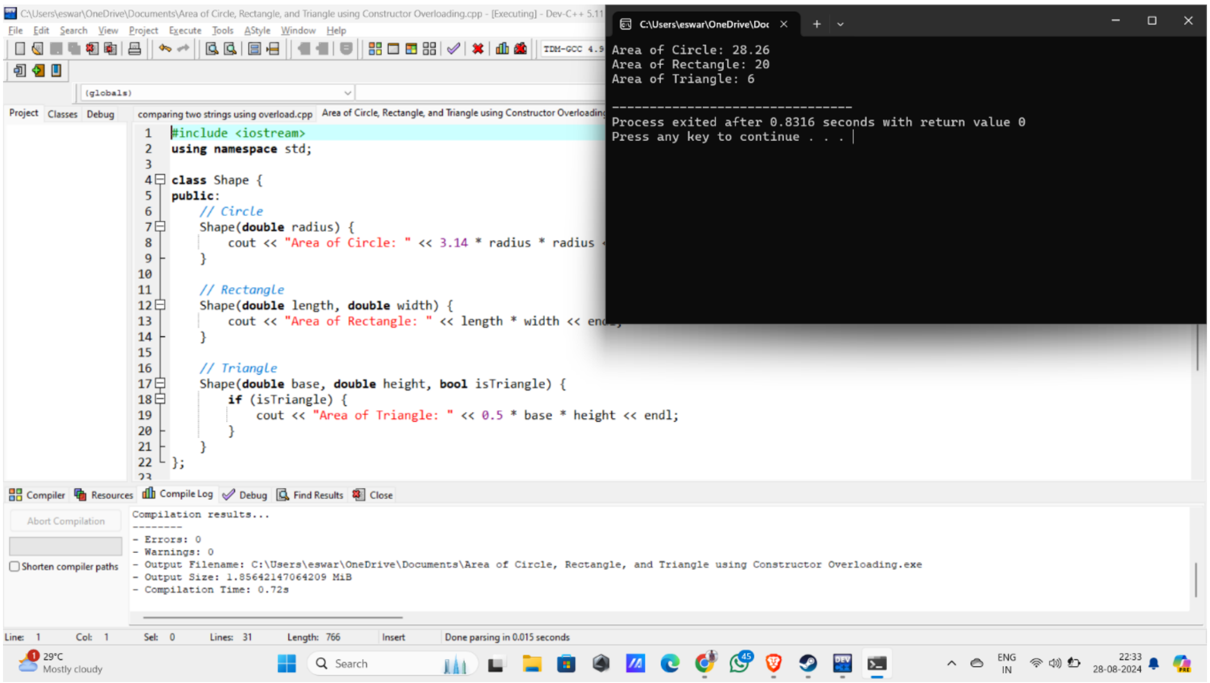
```
Both strings are not equal

--------------------------------
Process exited after 1.165 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\comparing two strings using overload.exe
- Output Size: 1.85638332366943 MiB
- Compilation Time: 1.06s
```

☐ Shorten compiler paths

Line: 28 Col: 1 Sel: 0 Lines: 28 Length: 516 Insert Done parsing in 0.437 seconds

2.Area of triangle , circle, rectangle using constructor


C:\Users\eswar\OneDrive\Documents\Area of Circle, Rectangle, and Triangle using Constructor Overloading.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
comparing two strings using overload.cpp
Area of Circle, Rectangle, and Triangle using Constructor Overloading
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
29°C
Mostly cloudy
Search
ENG
IN
22:33
28-08-2024

```cpp
#include <iostream>
using namespace std;

class Shape {
public:
    // Circle
    Shape(double radius) {
        cout << "Area of Circle: " << 3.14 * radius * radius
    }

    // Rectangle
    Shape(double length, double width) {
        cout << "Area of Rectangle: " << length * width << end
    }

    // Triangle
    Shape(double base, double height, bool isTriangle) {
        if (isTriangle) {
            cout << "Area of Triangle: " << 0.5 * base * height << endl;
        }
    }
};
```

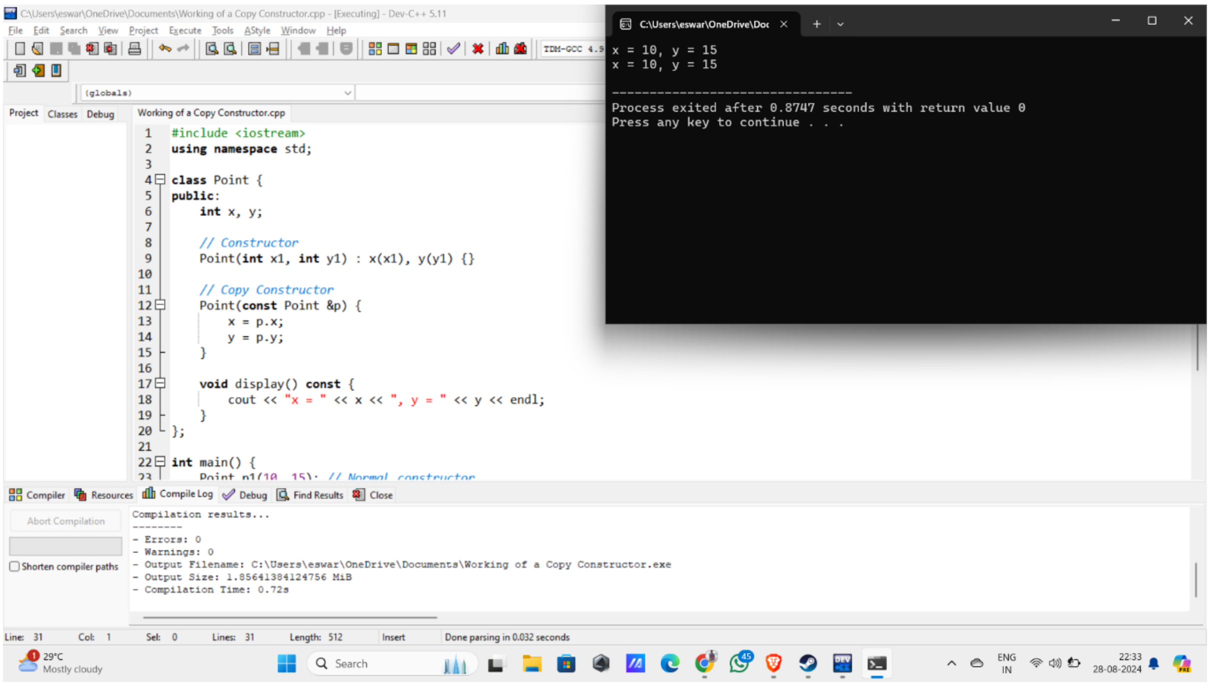
```
Area of Circle: 28.26
Area of Rectangle: 20
Area of Triangle: 6

--------------------------------
Process exited after 0.8316 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Area of Circle, Rectangle, and Triangle using Constructor Overloading.exe
- Output Size: 1.85642147064209 MiB
- Compilation Time: 0.72s
```

☐ Shorten compiler paths

Line: 1 Col: 1 Sel: 0 Lines: 31 Length: 766 Insert Done parsing in 0.015 seconds

3.Working of copy constructor


C:\Users\eswar\OneDrive\Documents\Working of a Copy Constructor.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
Working of a Copy Constructor.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
29°C
Mostly cloudy
Search
ENG IN
22:33
28-08-2024

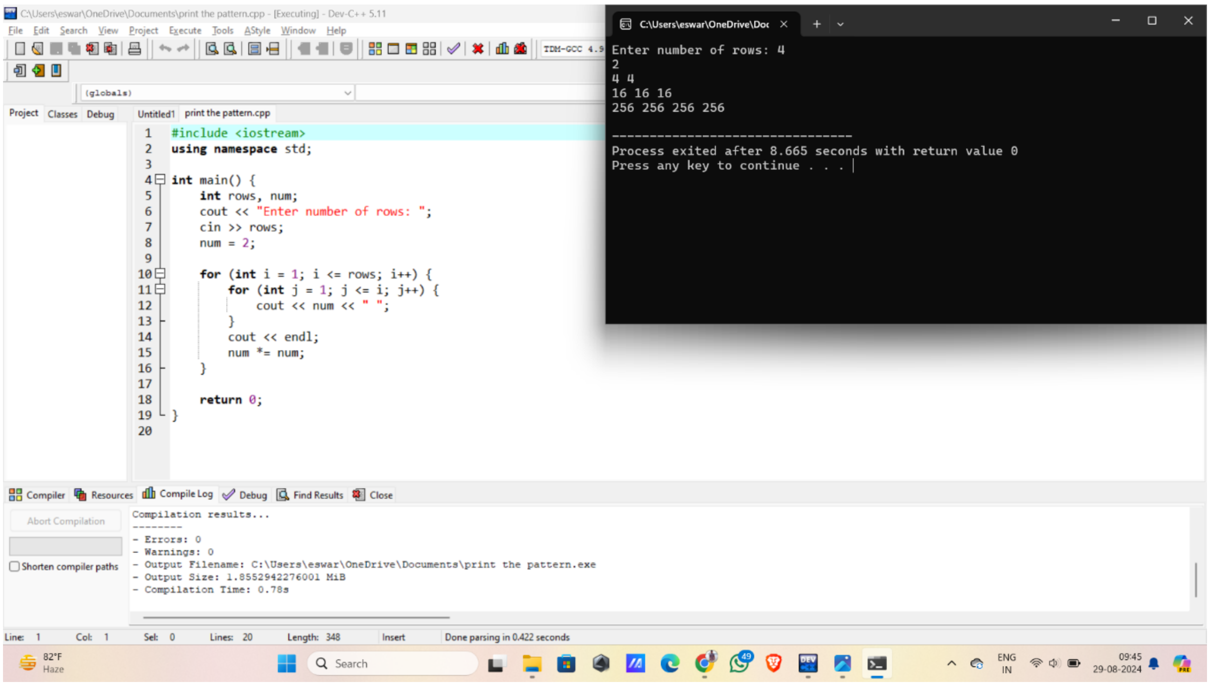
```cpp
#include <iostream>
using namespace std;

class Point {
public:
    int x, y;

    // Constructor
    Point(int x1, int y1) : x(x1), y(y1) {}

    // Copy Constructor
    Point(const Point &p) {
        x = p.x;
        y = p.y;
    }

    void display() const {
        cout << "x = " << x << ", y = " << y << endl;
    }
};

int main() {
    Point p1(10, 15); // Normal constructor
```

```
x = 10, y = 15
x = 10, y = 15

--------------------------------
Process exited after 0.8747 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Working of a Copy Constructor.exe
- Output Size: 1.85641384124756 MiB
- Compilation Time: 0.72s
```

Line: 31 Col: 1 Sel: 0 Lines: 31 Length: 512 Insert Done parsing in 0.032 seconds

4.Print the pattern


C:\Users\eswar\OneDrive\Documents\print the pattern.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
Untitled1 print the pattern.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
82°F
Haze
Search
ENG IN
09:45
29-08-2024

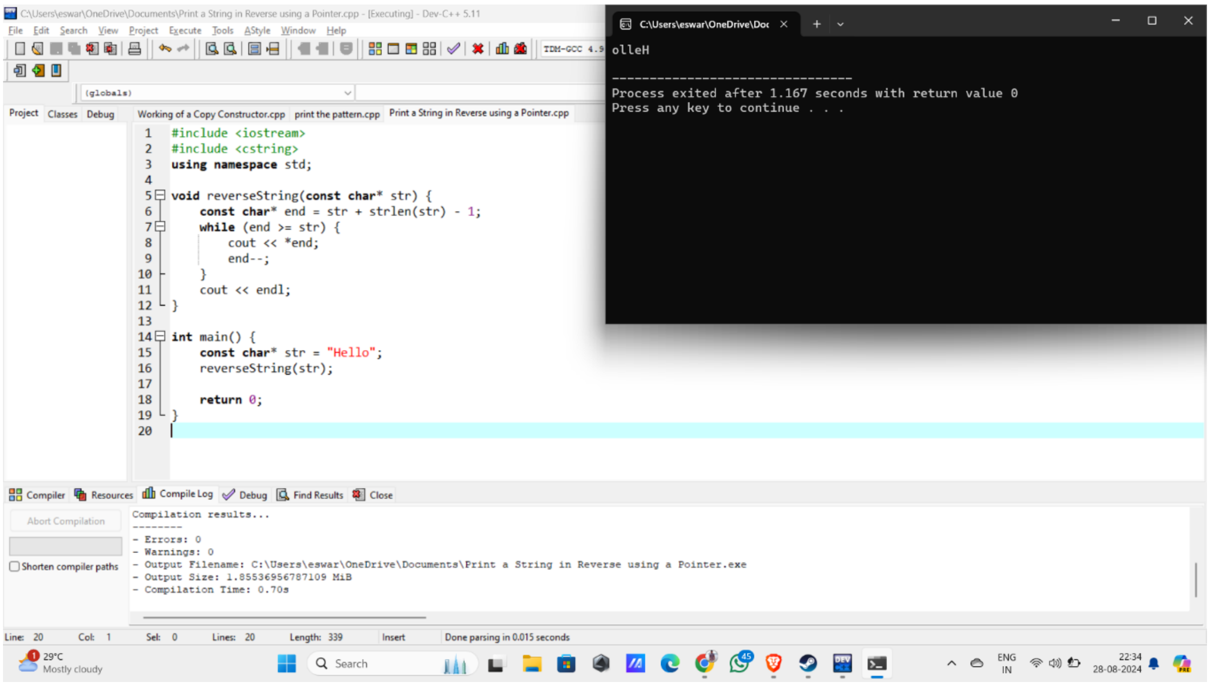
```cpp
#include <iostream>
using namespace std;

int main() {
    int rows, num;
    cout << "Enter number of rows: ";
    cin >> rows;
    num = 2;

    for (int i = 1; i <= rows; i++) {
        for (int j = 1; j <= i; j++) {
            cout << num << " ";
        }
        cout << endl;
        num *= num;
    }

    return 0;
}

```

```
Enter number of rows: 4
2
4 4
16 16 16
256 256 256 256

--------------------------------
Process exited after 8.665 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\print the pattern.exe
- Output Size: 1.8552942276001 MiB
- Compilation Time: 0.78s
```

Line: 1 Col: 1 Sel: 0 Lines: 20 Length: 348 Insert Done parsing in 0.422 seconds

5.Reverse a string using pointer

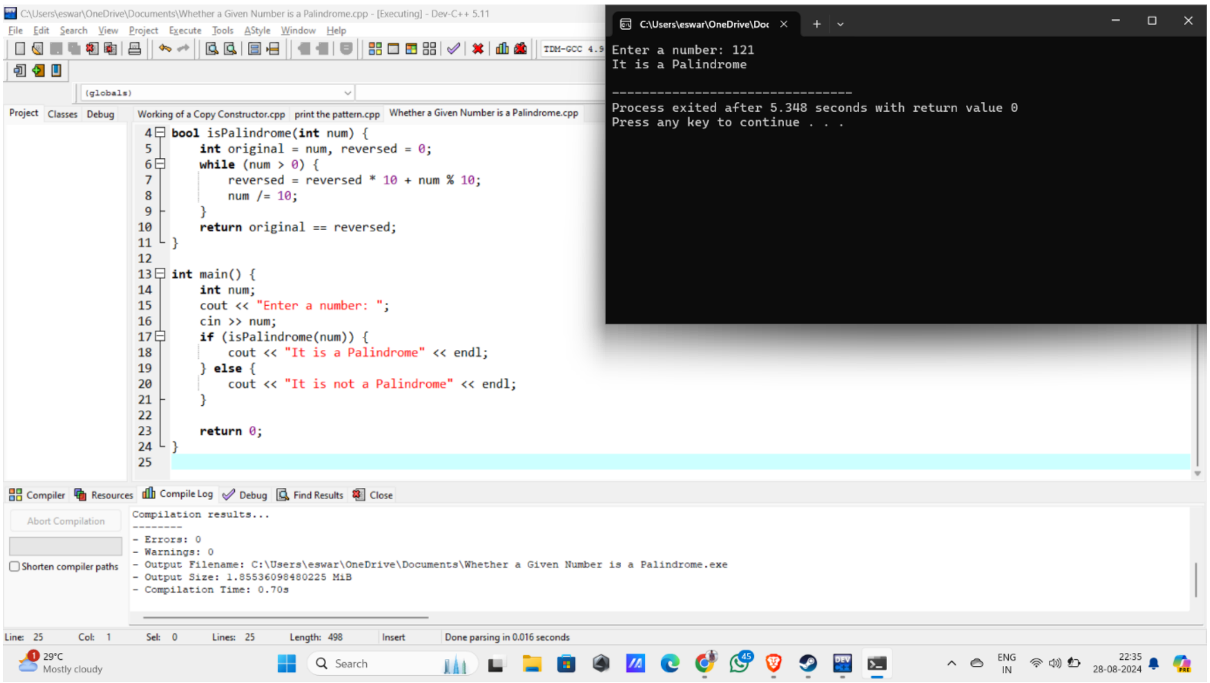

C:\Users\eswar\OneDrive\Documents\Print a String in Reverse using a Pointer.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
Working of a Copy Constructor.cpp
print the pattern.cpp
Print a String in Reverse using a Pointer.cpp
C:\Users\eswar\OneDrive\Doc
Compiler
Resources
Compile Log
Debug
Find Results
Close
Abort Compilation
Shorten compiler paths
Line: 20 Col: 1 Sel: 0 Lines: 20 Length: 339 Insert Done parsing in 0.015 seconds
29°C Mostly cloudy
22:34 28-08-2024

```cpp
#include <iostream>
#include <cstring>
using namespace std;

void reverseString(const char* str) {
    const char* end = str + strlen(str) - 1;
    while (end >= str) {
        cout << *end;
        end--;
    }
    cout << endl;
}

int main() {
    const char* str = "Hello";
    reverseString(str);

    return 0;
}
```

```
olleH

--------------------------------
Process exited after 1.167 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Print a String in Reverse using a Pointer.exe
- Output Size: 1.85536956787109 MiB
- Compilation Time: 0.70s
```

6.Palindrome

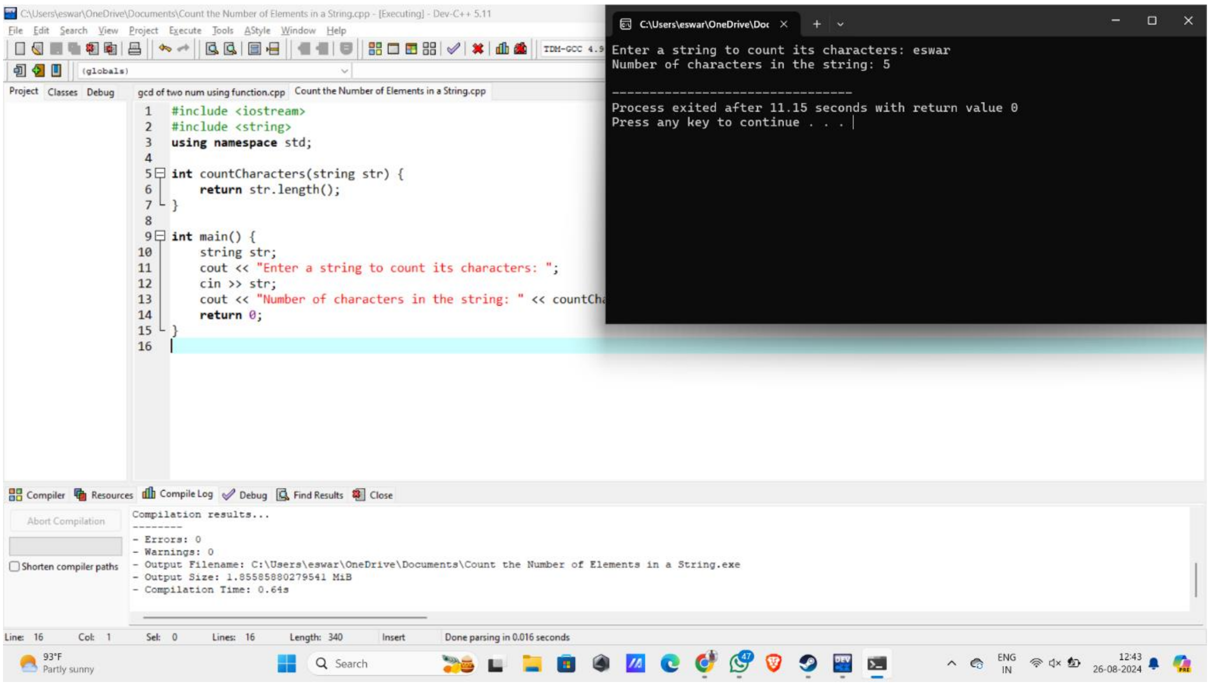

C:\Users\eswar\OneDrive\Documents\Whether a Given Number is a Palindrome.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
Working of a Copy Constructor.cpp
print the pattern.cpp
Whether a Given Number is a Palindrome.cpp
C:\Users\eswar\OneDrive\Doc
Compiler
Resources
Compile Log
Debug
Find Results
Close
Abort Compilation
Shorten compiler paths
Line: 25 Col: 1 Sel: 0 Lines: 25 Length: 498 Insert Done parsing in 0.016 seconds
29°C Mostly cloudy
22:35 28-08-2024

```cpp
bool isPalindrome(int num) {
    int original = num, reversed = 0;
    while (num > 0) {
        reversed = reversed * 10 + num % 10;
        num /= 10;
    }
    return original == reversed;
}

int main() {
    int num;
    cout << "Enter a number: ";
    cin >> num;
    if (isPalindrome(num)) {
        cout << "It is a Palindrome" << endl;
    } else {
        cout << "It is not a Palindrome" << endl;
    }

    return 0;
}
```

```
Enter a number: 121
It is a Palindrome

--------------------------------
Process exited after 5.348 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Whether a Given Number is a Palindrome.exe
- Output Size: 1.85536098480225 MiB
- Compilation Time: 0.70s
```

7.Non Negative integer



C:\Users\eswar\OneDrive\Documents\Count the Number of Elements in a String.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
gcd of two num using function.cpp
Count the Number of Elements in a String.cpp
C:\Users\eswar\OneDrive\Doc

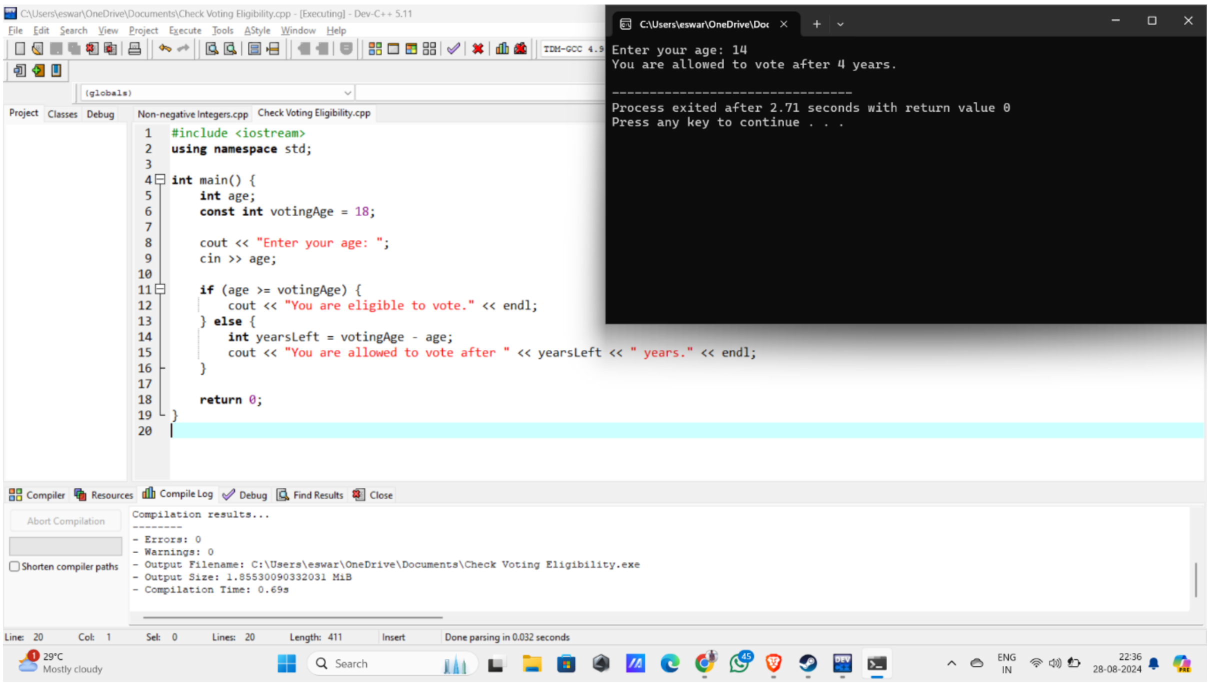
```cpp
#include <iostream>
#include <string>
using namespace std;

int countCharacters(string str) {
    return str.length();
}

int main() {
    string str;
    cout << "Enter a string to count its characters: ";
    cin >> str;
    cout << "Number of characters in the string: " << countCha
    return 0;
}
```

```
Enter a string to count its characters: eswar
Number of characters in the string: 5

--------------------------------
Process exited after 11.15 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Count the Number of Elements in a String.exe
- Output Size: 1.85585880279541 MiB
- Compilation Time: 0.64s
```

Line: 16 Col: 1 Sel: 0 Lines: 16 Length: 340 Insert Done parsing in 0.016 seconds
93°F
Partly sunny
Search
ENG
IN
12:43
26-08-2024

8.Vote



C:\Users\eswar\OneDrive\Documents\Check Voting Eligibility.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
Non-negative Integers.cpp
Check Voting Eligibility.cpp
C:\Users\eswar\OneDrive\Doc

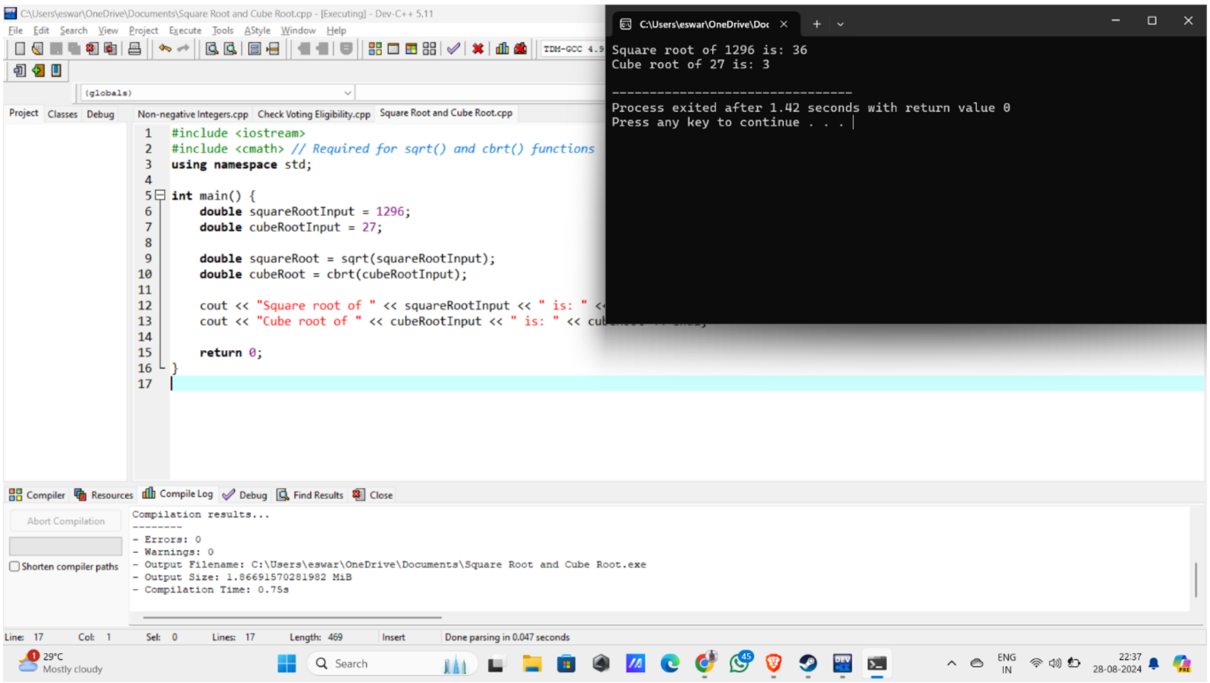
```cpp
#include <iostream>
using namespace std;

int main() {
    int age;
    const int votingAge = 18;

    cout << "Enter your age: ";
    cin >> age;

    if (age >= votingAge) {
        cout << "You are eligible to vote." << endl;
    } else {
        int yearsLeft = votingAge - age;
        cout << "You are allowed to vote after " << yearsLeft << " years." << endl;
    }

    return 0;
}
```

```
Enter your age: 14
You are allowed to vote after 4 years.

--------------------------------
Process exited after 2.71 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Check Voting Eligibility.exe
- Output Size: 1.85530090332031 MiB
- Compilation Time: 0.69s
```

Line: 20 Col: 1 Sel: 0 Lines: 20 Length: 411 Insert Done parsing in 0.032 seconds
29°C
Mostly cloudy
Search
ENG
IN
22:36
28-08-2024

9.Square root and cube root

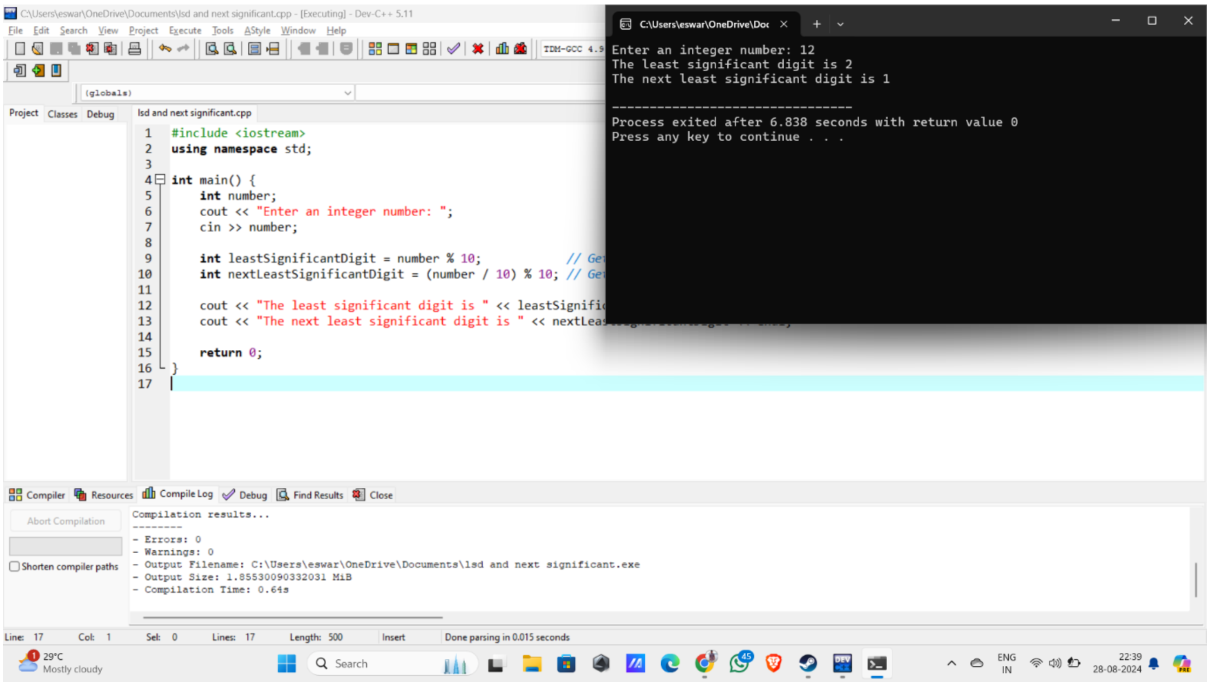

C:\Users\eswar\OneDrive\Documents\Square Root and Cube Root.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
Non-negative Integers.cpp
Check Voting Eligibility.cpp
Square Root and Cube Root.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Line: 17 Col: 1 Sel: 0 Lines: 17 Length: 469 Insert Done parsing in 0.047 seconds
29°C Mostly cloudy
Search
ENG IN
22:37 28-08-2024

```cpp
#include <iostream>
#include <cmath> // Required for sqrt() and cbrt() functions
using namespace std;

int main() {
    double squareRootInput = 1296;
    double cubeRootInput = 27;

    double squareRoot = sqrt(squareRootInput);
    double cubeRoot = cbrt(cubeRootInput);

    cout << "Square root of " << squareRootInput << " is: " <
    cout << "Cube root of " << cubeRootInput << " is: " << cubeRoot << endl;

    return 0;
}
```

```
Square root of 1296 is: 36
Cube root of 27 is: 3

--------------------------------
Process exited after 1.42 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\Square Root and Cube Root.exe
- Output Size: 1.86691570281982 MiB
- Compilation Time: 0.75s
```

10.LSD and next significant

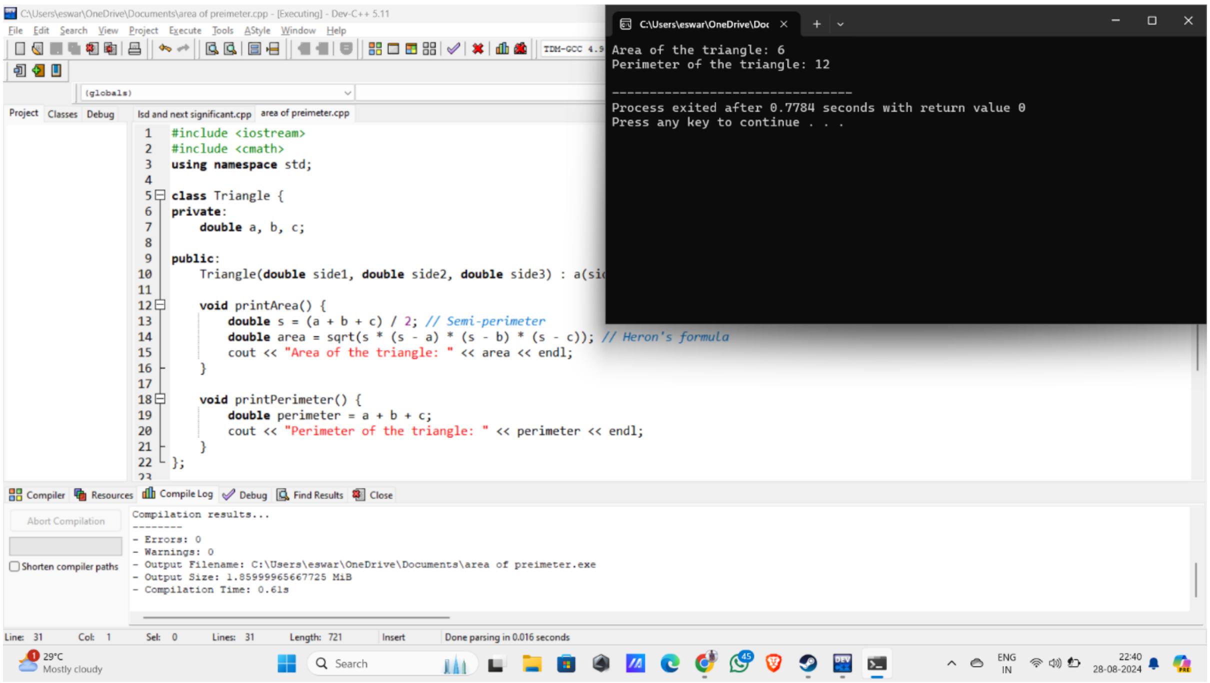

C:\Users\eswar\OneDrive\Documents\lsd and next significant.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
lsd and next significant.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Line: 17 Col: 1 Sel: 0 Lines: 17 Length: 500 Insert Done parsing in 0.015 seconds
29°C Mostly cloudy
Search
ENG IN
22:39 28-08-2024

```cpp
#include <iostream>
using namespace std;

int main() {
    int number;
    cout << "Enter an integer number: ";
    cin >> number;

    int leastSignificantDigit = number % 10;            // Ge
    int nextLeastSignificantDigit = (number / 10) % 10; // Ge

    cout << "The least significant digit is " << leastSignifi
    cout << "The next least significant digit is " << nextLeastSignificantDigit << endl;

    return 0;
}
```

```
Enter an integer number: 12
The least significant digit is 2
The next least significant digit is 1

--------------------------------
Process exited after 6.838 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\lsd and next significant.exe
- Output Size: 1.85530090332031 MiB
- Compilation Time: 0.64s
```

11.Area of triangle and area of perimeter

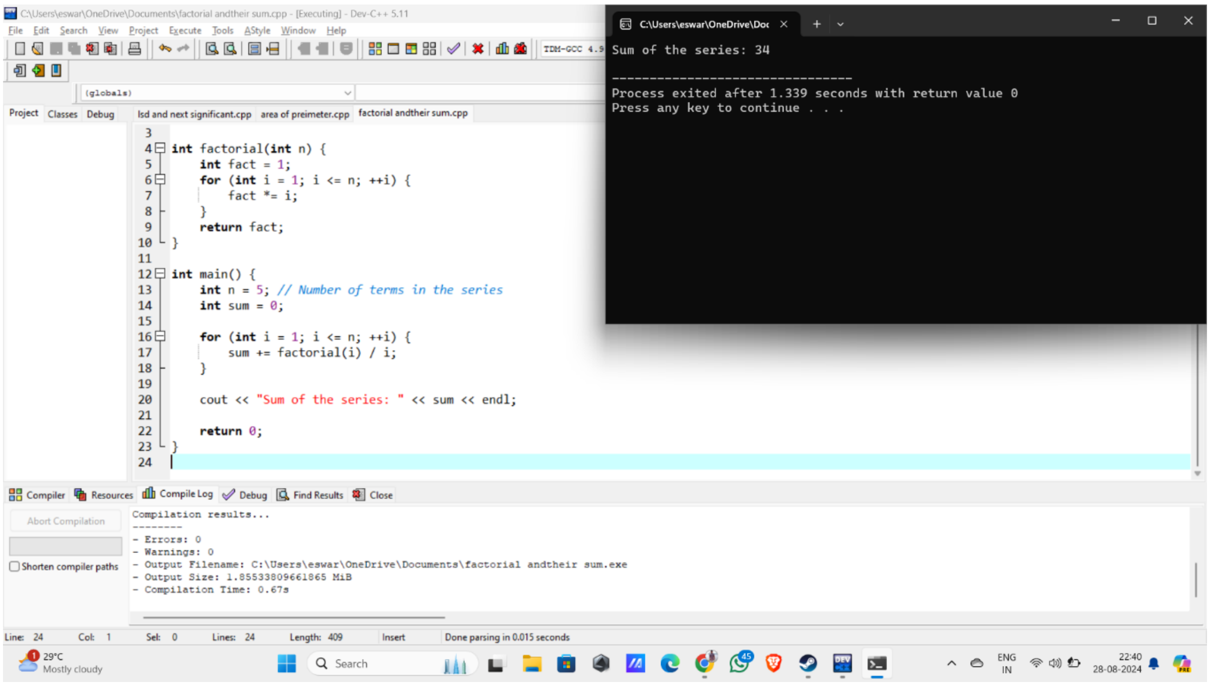

C:\Users\eswar\OneDrive\Documents\area of preimeter.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
lsd and next significant.cpp
area of preimeter.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Line: 31 Col: 1 Sel: 0 Lines: 31 Length: 721 Insert Done parsing in 0.016 seconds
29°C Mostly cloudy
Search
ENG IN
22:40 28-08-2024

```cpp
#include <iostream>
#include <cmath>
using namespace std;

class Triangle {
private:
    double a, b, c;

public:
    Triangle(double side1, double side2, double side3) : a(si

    void printArea() {
        double s = (a + b + c) / 2; // Semi-perimeter
        double area = sqrt(s * (s - a) * (s - b) * (s - c)); // Heron's formula
        cout << "Area of the triangle: " << area << endl;
    }

    void printPerimeter() {
        double perimeter = a + b + c;
        cout << "Perimeter of the triangle: " << perimeter << endl;
    }
};
```

```
Area of the triangle: 6
Perimeter of the triangle: 12

--------------------------------
Process exited after 0.7784 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\area of preimeter.exe
- Output Size: 1.85999965667725 MiB
- Compilation Time: 0.61s
```

12.Sum of the series

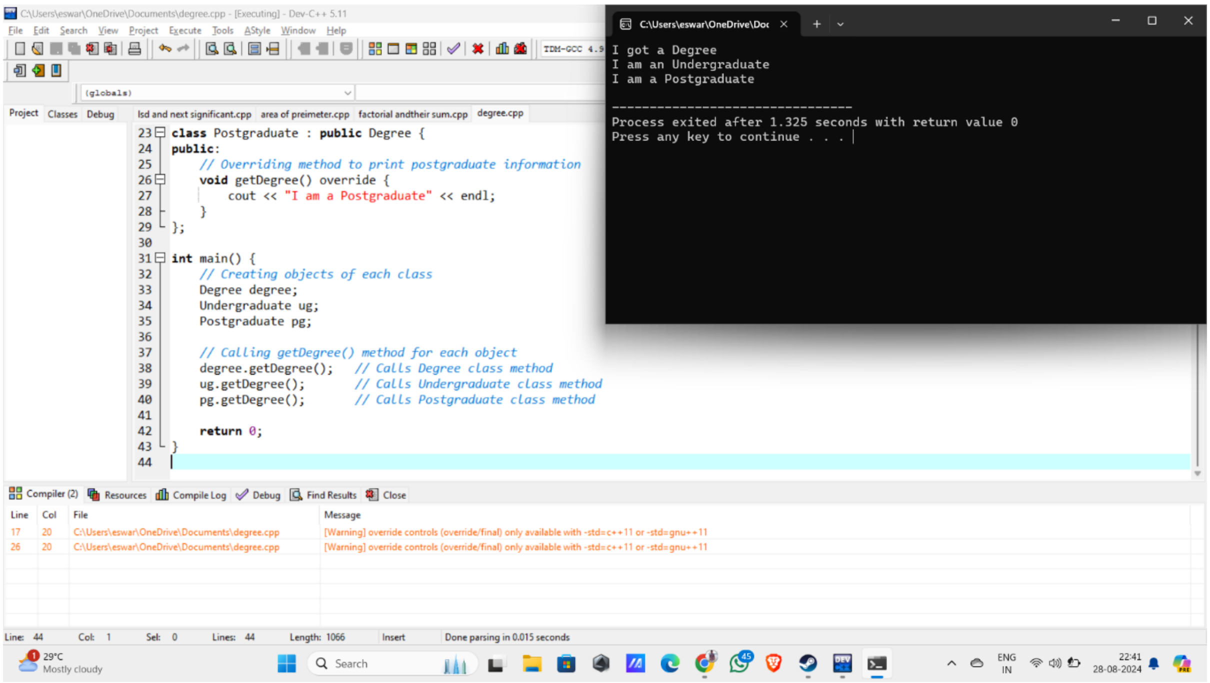

C:\Users\eswar\OneDrive\Documents\factorial andtheir sum.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Classes Debug
lsd and next significant.cpp
area of preimeter.cpp
factorial andtheir sum.cpp
C:\Users\eswar\OneDrive\Doc
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Line: 24 Col: 1 Sel: 0 Lines: 24 Length: 409 Insert Done parsing in 0.015 seconds
29°C Mostly cloudy
Search
ENG IN
22:40 28-08-2024

```cpp

int factorial(int n) {
    int fact = 1;
    for (int i = 1; i <= n; ++i) {
        fact *= i;
    }
    return fact;
}

int main() {
    int n = 5; // Number of terms in the series
    int sum = 0;

    for (int i = 1; i <= n; ++i) {
        sum += factorial(i) / i;
    }

    cout << "Sum of the series: " << sum << endl;

    return 0;
}

```

```
Sum of the series: 34

--------------------------------
Process exited after 1.339 seconds with return value 0
Press any key to continue . . .
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\factorial andtheir sum.exe
- Output Size: 1.85533809661865 MiB
- Compilation Time: 0.67s
```

13.Class degree



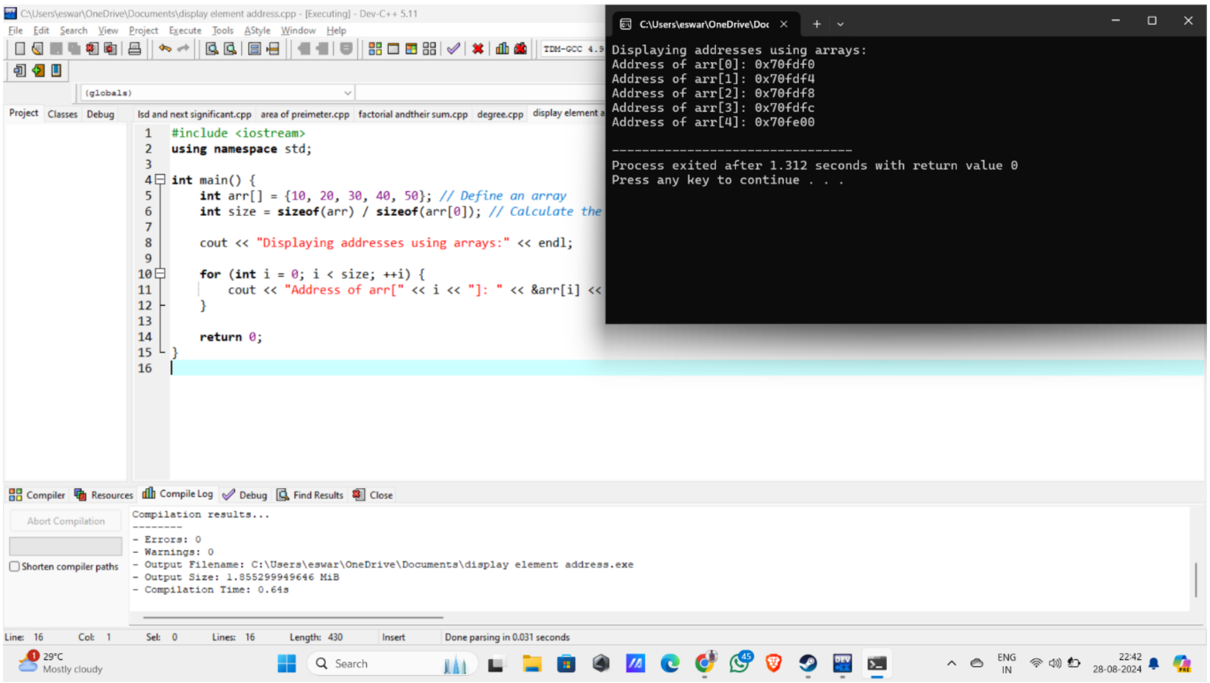
C:\Users\eswar\OneDrive\Documents\degree.cpp - [Executing] - Dev-C++ 5.11

```cpp
class Postgraduate : public Degree {
public:
    // Overriding method to print postgraduate information
    void getDegree() override {
        cout << "I am a Postgraduate" << endl;
    }
};

int main() {
    // Creating objects of each class
    Degree degree;
    Undergraduate ug;
    Postgraduate pg;

    // Calling getDegree() method for each object
    degree.getDegree();   // Calls Degree class method
    ug.getDegree();       // Calls Undergraduate class method
    pg.getDegree();       // Calls Postgraduate class method

    return 0;
}
```

Line	Col	File	Message
17	20	C:\Users\eswar\OneDrive\Documents\degree.cpp	[Warning] override controls (override/final) only available with -std=c++11 or -std=gnu++11
26	20	C:\Users\eswar\OneDrive\Documents\degree.cpp	[Warning] override controls (override/final) only available with -std=c++11 or -std=gnu++11

```
I got a Degree
I am an Undergraduate
I am a Postgraduate

--------------------------------
Process exited after 1.325 seconds with return value 0
Press any key to continue . . .
```

14.Display the element address



C:\Users\eswar\OneDrive\Documents\display element address.cpp - [Executing] - Dev-C++ 5.11

```cpp
#include <iostream>
using namespace std;

int main() {
    int arr[] = {10, 20, 30, 40, 50}; // Define an array
    int size = sizeof(arr) / sizeof(arr[0]); // Calculate the

    cout << "Displaying addresses using arrays:" << endl;

    for (int i = 0; i < size; ++i) {
        cout << "Address of arr[" << i << "]: " << &arr[i] <<
    }

    return 0;
}
```

```
Compilation results...
--------
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\eswar\OneDrive\Documents\display element address.exe
- Output Size: 1.855299949646 MiB
- Compilation Time: 0.64s
```

```
Displaying addresses using arrays:
Address of arr[0]: 0x70fdf0
Address of arr[1]: 0x70fdf4
Address of arr[2]: 0x70fdf8
Address of arr[3]: 0x70fdfc
Address of arr[4]: 0x70fe00

--------------------------------
Process exited after 1.312 seconds with return value 0
Press any key to continue . . .
```