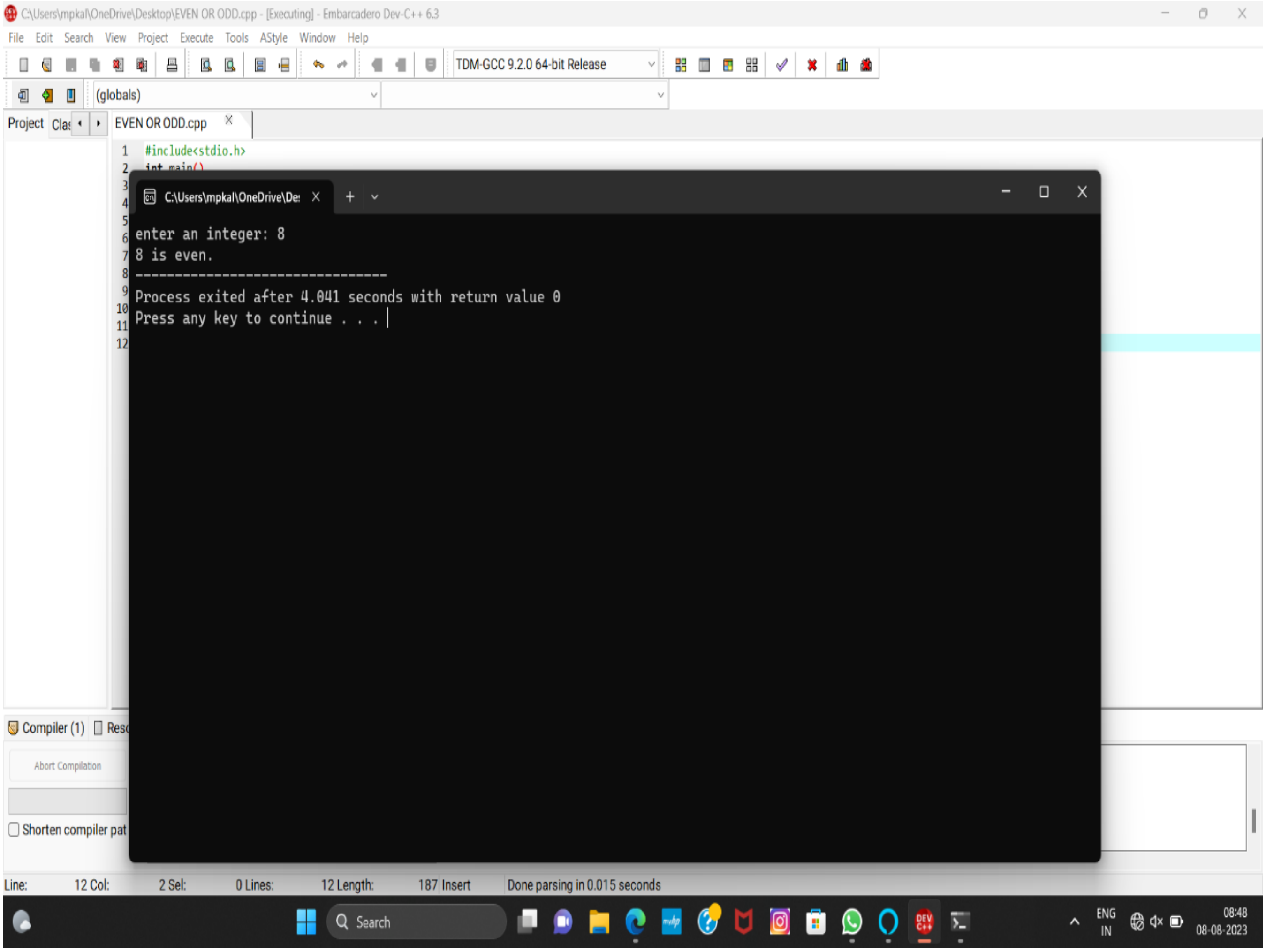
1.EVEN OR ODD



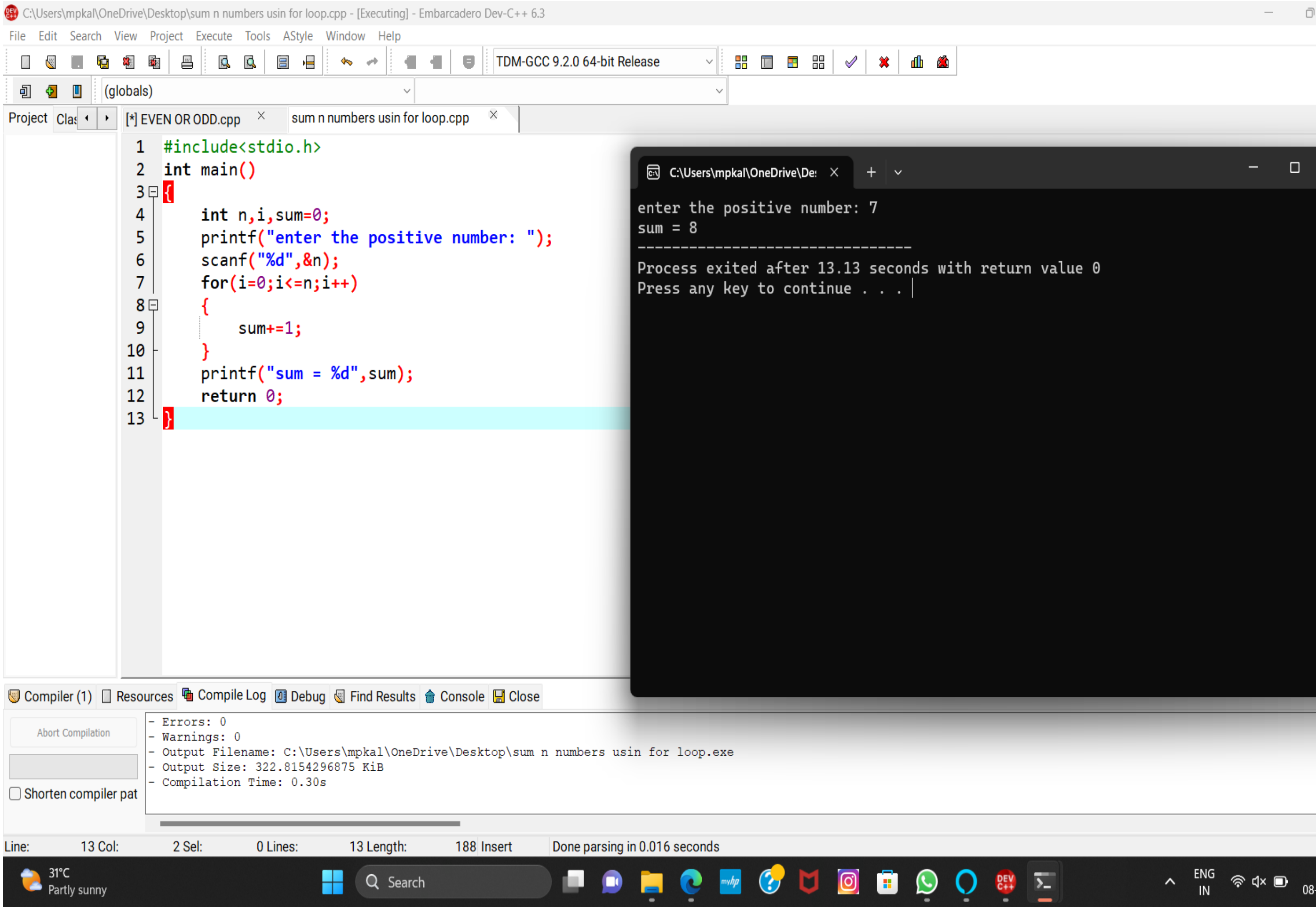
C:\Users\mpkal\OneDrive\Desktop\EVEN OR ODD.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project
EVEN OR ODD.cpp
C:\Users\mpkal\OneDrive\De:
Compiler (1)
Abort Compilation
Shorten compiler pat
Search
ENG IN
08:48
08-08-2023

```
#include<stdio.h>
int main()
```

```
enter an integer: 8
8 is even.
--------------------------------
Process exited after 4.041 seconds with return value 0
Press any key to continue . . .
```

Line: 12 Col: 2 Sel: 0 Lines: 12 Length: 187 Insert Done parsing in 0.015 seconds

2.sum of n numbers using for loop



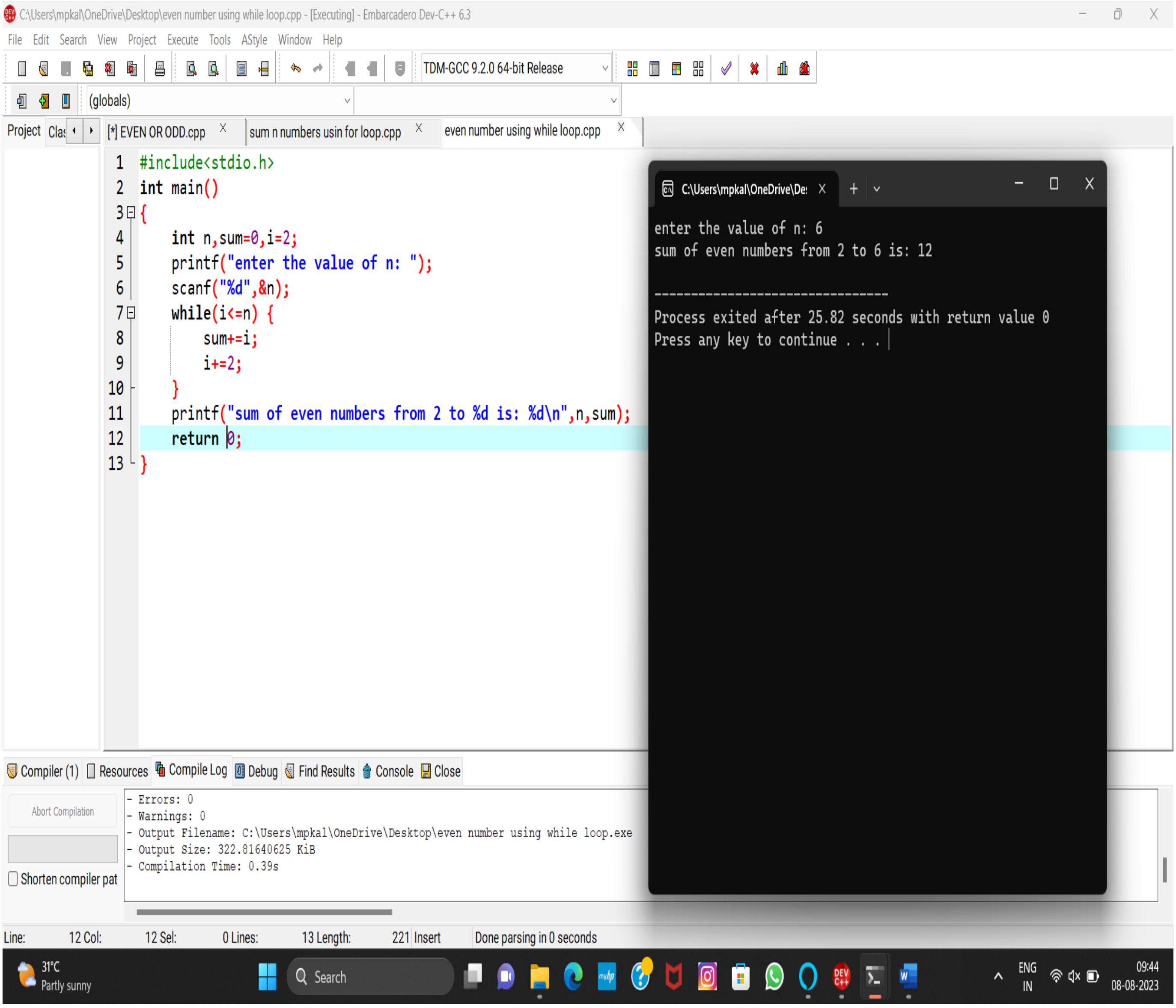
C:\Users\mpkal\OneDrive\Desktop\sum n numbers usin for loop.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
C:\Users\mpkal\OneDrive\De:
Compiler (1) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 13 Col: 2 Sel: 0 Lines: 13 Length: 188 Insert Done parsing in 0.016 seconds
31°C
Partly sunny
Search
ENG
IN

```c
#include<stdio.h>
int main()
{
    int n,i,sum=0;
    printf("enter the positive number: ");
    scanf("%d",&n);
    for(i=0;i<=n;i++)
    {
        sum+=1;
    }
    printf("sum = %d",sum);
    return 0;
}
```

```
enter the positive number: 7
sum = 8
--------------------------------
Process exited after 13.13 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\sum n numbers usin for loop.exe
- Output Size: 322.8154296875 KiB
- Compilation Time: 0.30s
```

3.sum of even num using while loop


C:\Users\mpkal\OneDrive\Desktop\even number using while loop.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
even number using while loop.cpp
C:\Users\mpkal\OneDrive\De:
Compiler (1) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
31°C
Partly sunny
Search
ENG
IN
09:44
08-08-2023

```
#include<stdio.h>
int main()
{
    int n,sum=0,i=2;
    printf("enter the value of n: ");
    scanf("%d",&n);
    while(i<=n) {
        sum+=i;
        i+=2;
    }
    printf("sum of even numbers from 2 to %d is: %d\n",n,sum);
    return 0;
}
```

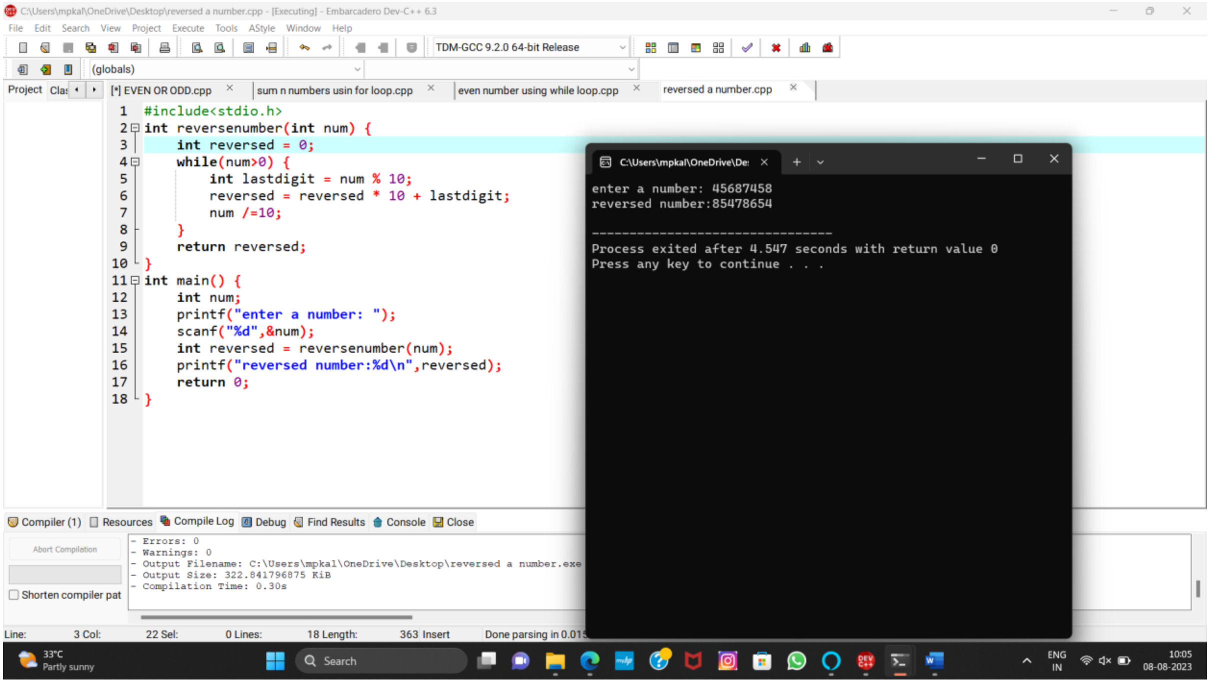
```
enter the value of n: 6
sum of even numbers from 2 to 6 is: 12

--------------------------------
Process exited after 25.82 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\even number using while loop.exe
- Output Size: 322.81640625 KiB
- Compilation Time: 0.39s
```

```
Line: 12 Col: 12 Sel: 0 Lines: 13 Length: 221 Insert Done parsing in 0 seconds
```

4.reversed a number



C:\Users\mpkal\OneDrive\Desktop\reversed a number.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
even number using while loop.cpp
reversed a number.cpp
C:\Users\mpkal\OneDrive\De:
Compiler (1) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 3 Col: 22 Sel: 0 Lines: 18 Length: 363 Insert Done parsing in 0.015
33°C
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Search
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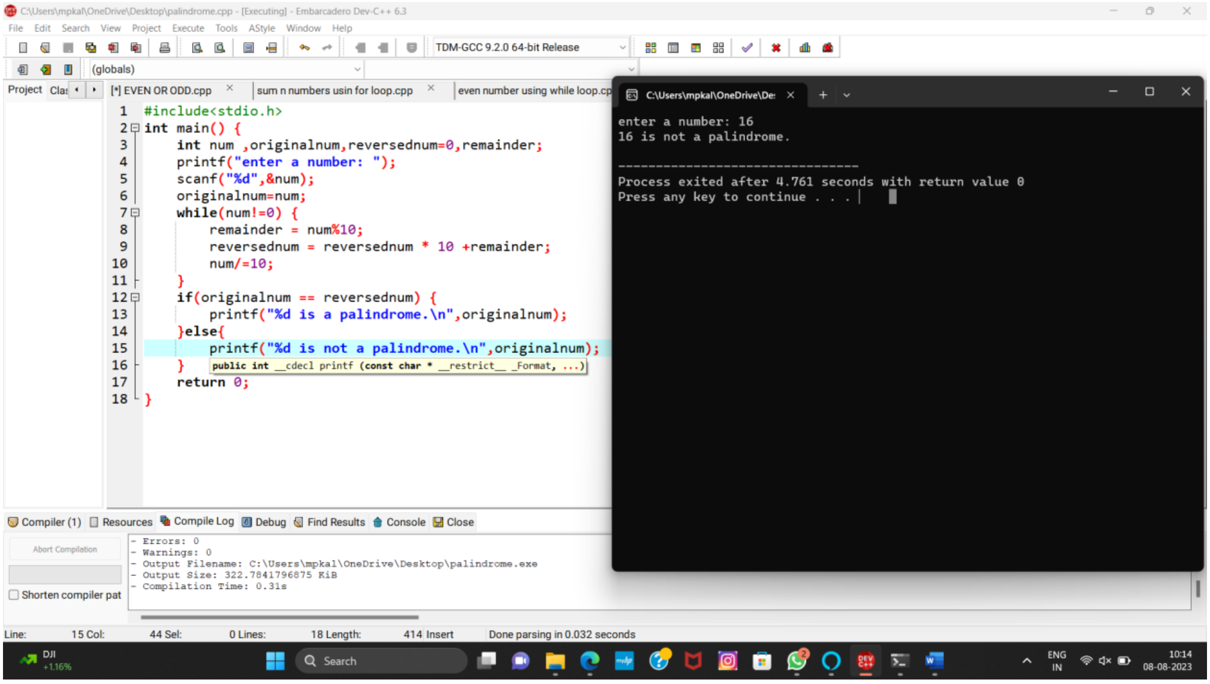
10:05
08-08-2023

```c
#include<stdio.h>
int reversenumber(int num) {
    int reversed = 0;
    while(num>0) {
        int lastdigit = num % 10;
        reversed = reversed * 10 + lastdigit;
        num /=10;
    }
    return reversed;
}
int main() {
    int num;
    printf("enter a number: ");
    scanf("%d",&num);
    int reversed = reversenumber(num);
    printf("reversed number:%d\n",reversed);
    return 0;
}
```

```
enter a number: 45687458
reversed number:85478654

--------------------------------
Process exited after 4.547 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\reversed a number.exe
- Output Size: 322.841796875 KiB
- Compilation Time: 0.30s
```

5.palindrome



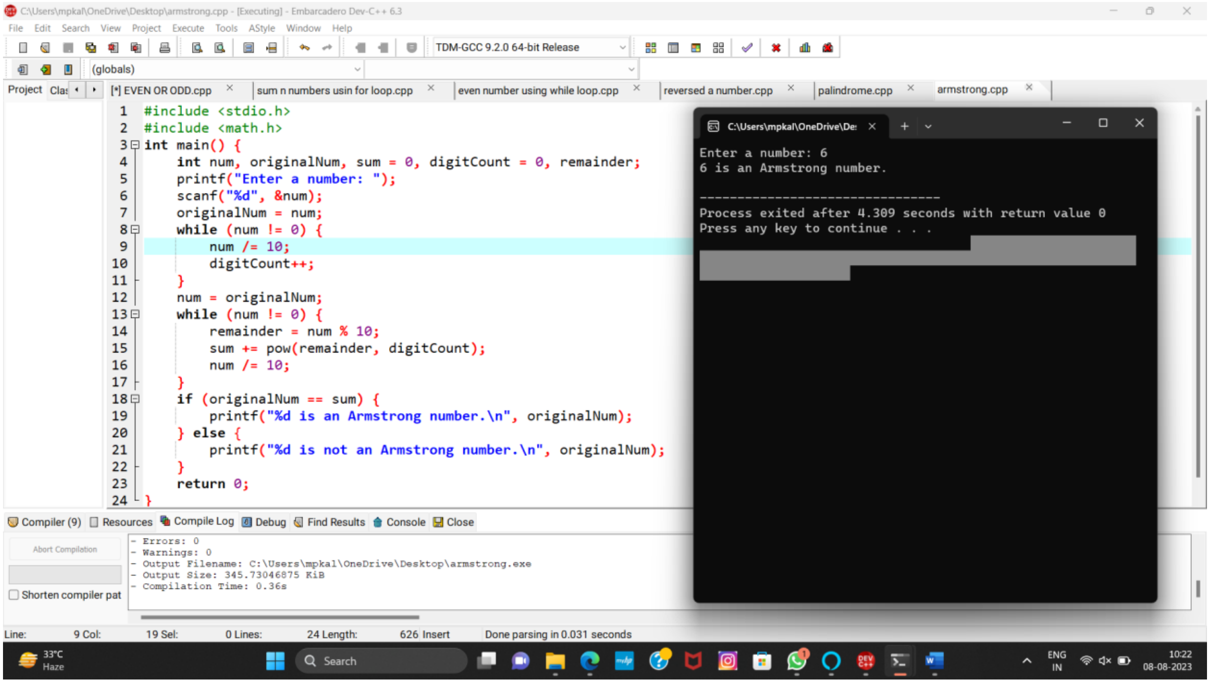
C:\Users\mpkal\OneDrive\Desktop\palindrome.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
even number using while loop.cp
C:\Users\mpkal\OneDrive\De:
public int __cdecl printf (const char * __restrict__ _Format, ...)
Compiler (1) Resources Compile Log Debug Find Results Console Close
Abort Compilation
□ Shorten compiler pat
Line: 15 Col: 44 Sel: 0 Lines: 18 Length: 414 Insert Done parsing in 0.032 seconds
DJI +1.16%
Search
ENG IN
10:14 08-08-2023

```c
#include<stdio.h>
int main() {
    int num ,originalnum,reversednum=0,remainder;
    printf("enter a number: ");
    scanf("%d",&num);
    originalnum=num;
    while(num!=0) {
        remainder = num%10;
        reversednum = reversednum * 10 +remainder;
        num/=10;
    }
    if(originalnum == reversednum) {
        printf("%d is a palindrome.\n",originalnum);
    }else{
        printf("%d is not a palindrome.\n",originalnum);
    }
    return 0;
}
```

```
enter a number: 16
16 is not a palindrome.

--------------------------------
Process exited after 4.761 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\palindrome.exe
- Output Size: 322.7841796875 KiB
- Compilation Time: 0.31s
```

6.armstrong number



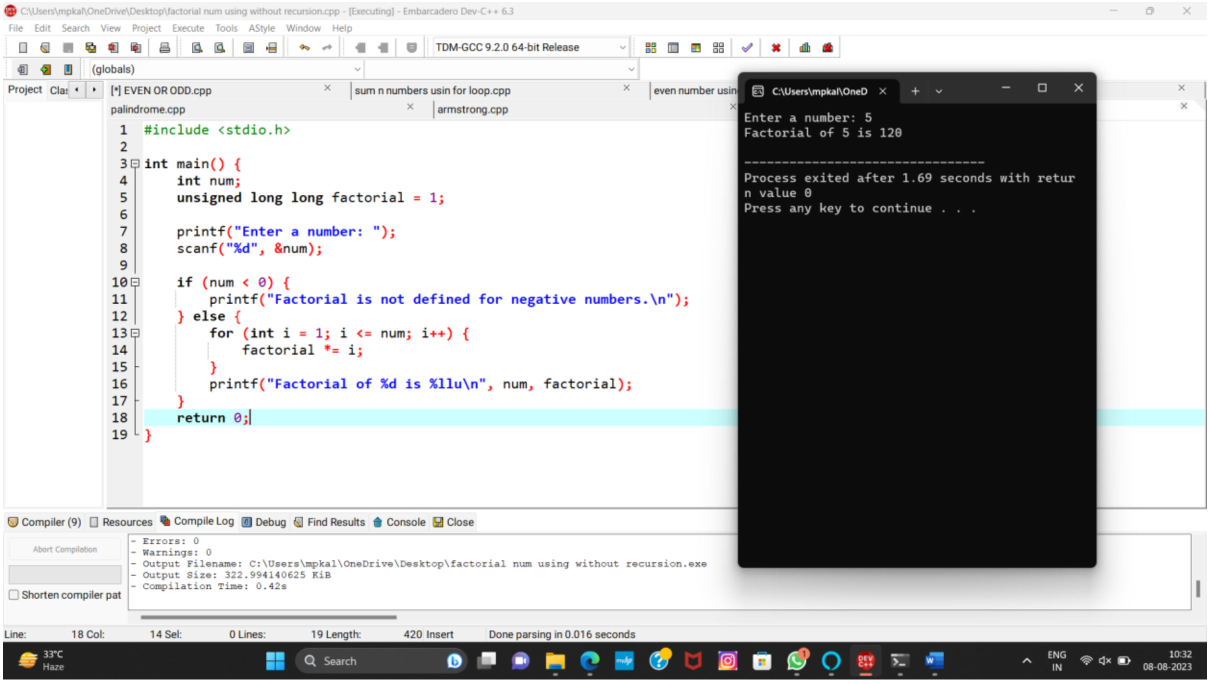
C:\Users\mpkal\OneDrive\Desktop\armstrong.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
even number using while loop.cpp
reversed a number.cpp
palindrome.cpp
armstrong.cpp
C:\Users\mpkal\OneDrive\De:
Compiler (9) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 9 Col: 19 Sel: 0 Lines: 24 Length: 626 Insert Done parsing in 0.031 seconds
33°C
Haze
Search
ENG
IN
10:22
08-08-2023

```c
#include <stdio.h>
#include <math.h>
int main() {
    int num, originalNum, sum = 0, digitCount = 0, remainder;
    printf("Enter a number: ");
    scanf("%d", &num);
    originalNum = num;
    while (num != 0) {
        num /= 10;
        digitCount++;
    }
    num = originalNum;
    while (num != 0) {
        remainder = num % 10;
        sum += pow(remainder, digitCount);
        num /= 10;
    }
    if (originalNum == sum) {
        printf("%d is an Armstrong number.\n", originalNum);
    } else {
        printf("%d is not an Armstrong number.\n", originalNum);
    }
    return 0;
}
```

```
Enter a number: 6
6 is an Armstrong number.

--------------------------------
Process exited after 4.309 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\armstrong.exe
- Output Size: 345.73046875 KiB
- Compilation Time: 0.36s
```

7.factorial num using without recursion

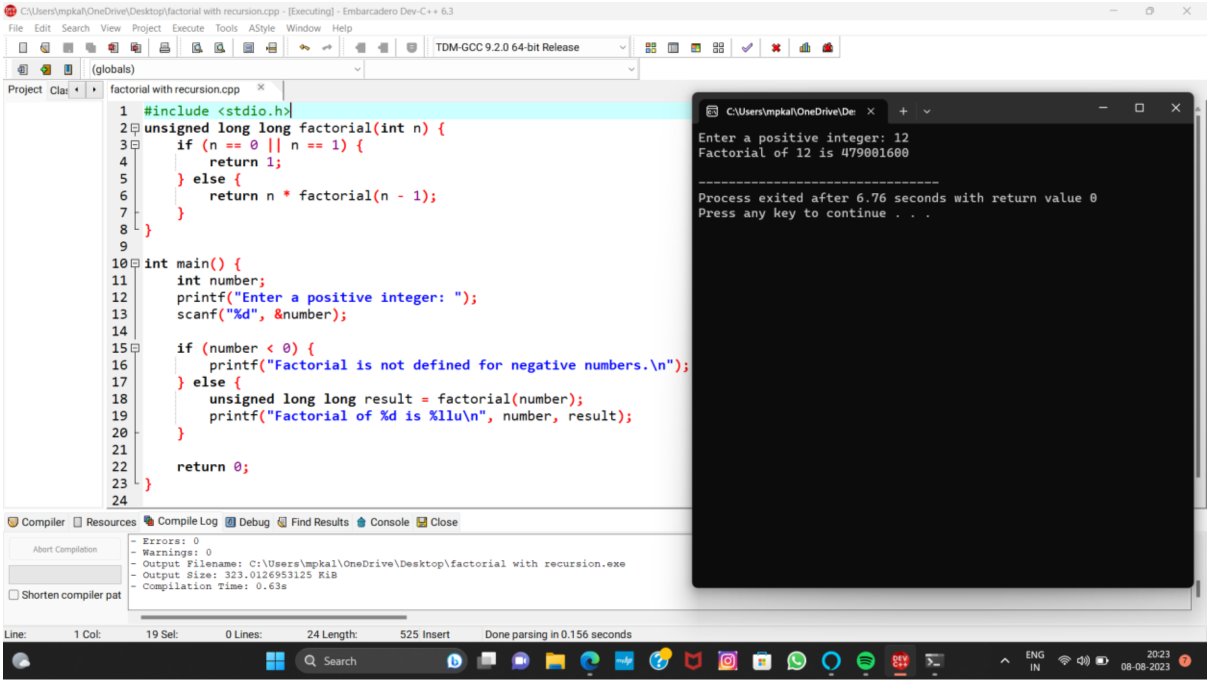

C:\Users\mpkal\OneDrive\Desktop\factorial num using without recursion.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
[*] EVEN OR ODD.cpp
sum n numbers usin for loop.cpp
even number usin
palindrome.cpp
armstrong.cpp
C:\Users\mpkal\OneD
Compiler (9) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 18 Col: 14 Sel: 0 Lines: 19 Length: 420 Insert Done parsing in 0.016 seconds
33°C Haze
Search
ENG IN
10:32 08-08-2023

```c
#include <stdio.h>

int main() {
    int num;
    unsigned long long factorial = 1;

    printf("Enter a number: ");
    scanf("%d", &num);

    if (num < 0) {
        printf("Factorial is not defined for negative numbers.\n");
    } else {
        for (int i = 1; i <= num; i++) {
            factorial *= i;
        }
        printf("Factorial of %d is %llu\n", num, factorial);
    }
    return 0;
}
```

```
Enter a number: 5
Factorial of 5 is 120

--------------------------------
Process exited after 1.69 seconds with retur
n value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\factorial num using without recursion.exe
- Output Size: 322.994140625 KiB
- Compilation Time: 0.42s
```

8.factorial with recursion



C:\Users\mpkal\OneDrive\Desktop\factorial with recursion.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
factorial with recursion.cpp
C:\Users\mpkal\OneDrive\De:
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Search
ENG IN
20:23
08-08-2023

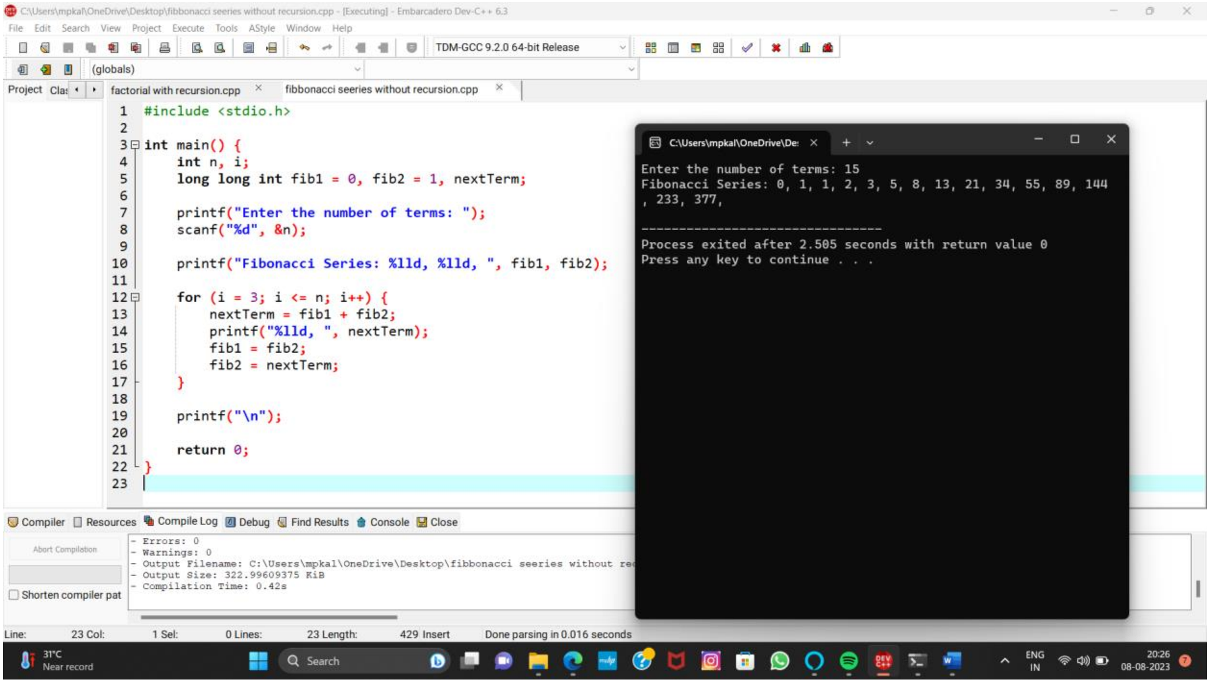
```c
#include <stdio.h>
unsigned long long factorial(int n) {
    if (n == 0 || n == 1) {
        return 1;
    } else {
        return n * factorial(n - 1);
    }
}

int main() {
    int number;
    printf("Enter a positive integer: ");
    scanf("%d", &number);

    if (number < 0) {
        printf("Factorial is not defined for negative numbers.\n");
    } else {
        unsigned long long result = factorial(number);
        printf("Factorial of %d is %llu\n", number, result);
    }

    return 0;
}
```

```
Enter a positive integer: 12
Factorial of 12 is 479001600

--------------------------------
Process exited after 6.76 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\factorial with recursion.exe
- Output Size: 323.0126953125 KiB
- Compilation Time: 0.63s
```

Line: 1 Col: 19 Sel: 0 Lines: 24 Length: 525 Insert Done parsing in 0.156 seconds

9.fibbonacci without recursion



C:\Users\mpkal\OneDrive\Desktop\fibbonacci seeries without recursion.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
factorial with recursion.cpp
fibbonacci seeries without recursion.cpp
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
C:\Users\mpkal\OneDrive\De:
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Search
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20:26
08-08-2023

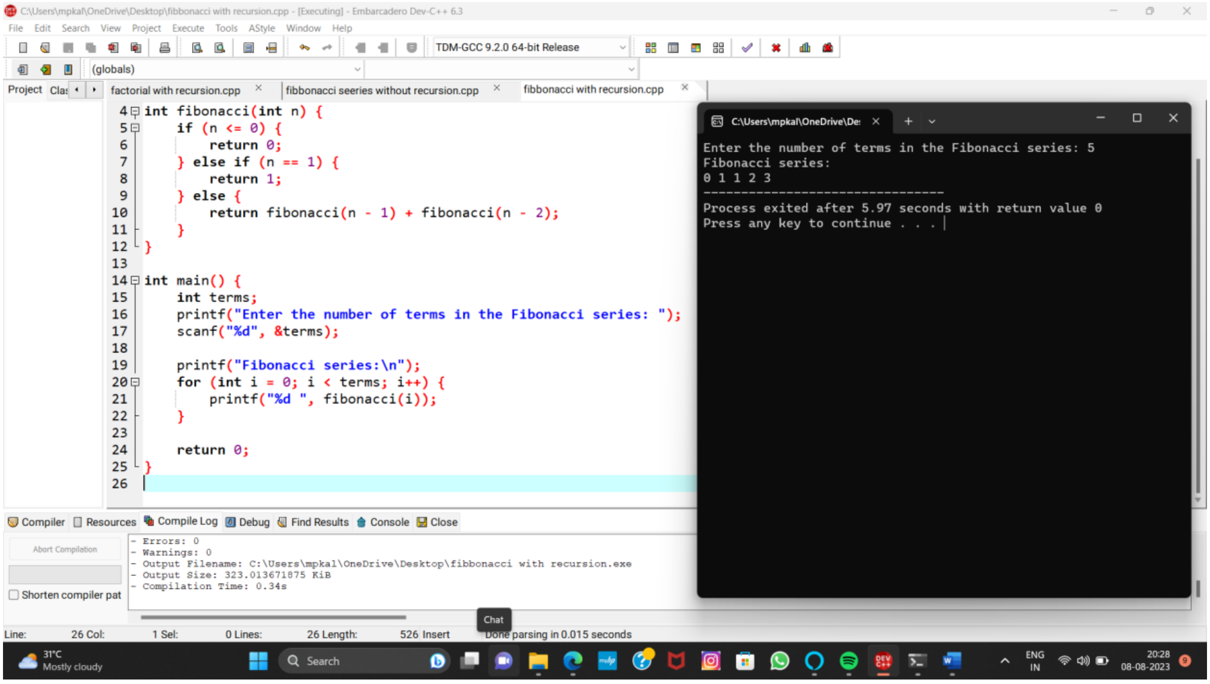
```c
#include <stdio.h>

int main() {
    int n, i;
    long long int fib1 = 0, fib2 = 1, nextTerm;

    printf("Enter the number of terms: ");
    scanf("%d", &n);

    printf("Fibonacci Series: %lld, %lld, ", fib1, fib2);

    for (i = 3; i <= n; i++) {
        nextTerm = fib1 + fib2;
        printf("%lld, ", nextTerm);
        fib1 = fib2;
        fib2 = nextTerm;
    }

    printf("\n");

    return 0;
}
```

```
Enter the number of terms: 15
Fibonacci Series: 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144
, 233, 377,

--------------------------------
Process exited after 2.505 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\fibbonacci seeries without re
- Output Size: 322.99609375 KiB
- Compilation Time: 0.42s
```

Line: 23 Col: 1 Sel: 0 Lines: 23 Length: 429 Insert Done parsing in 0.016 seconds

10.fibonacci with recursion



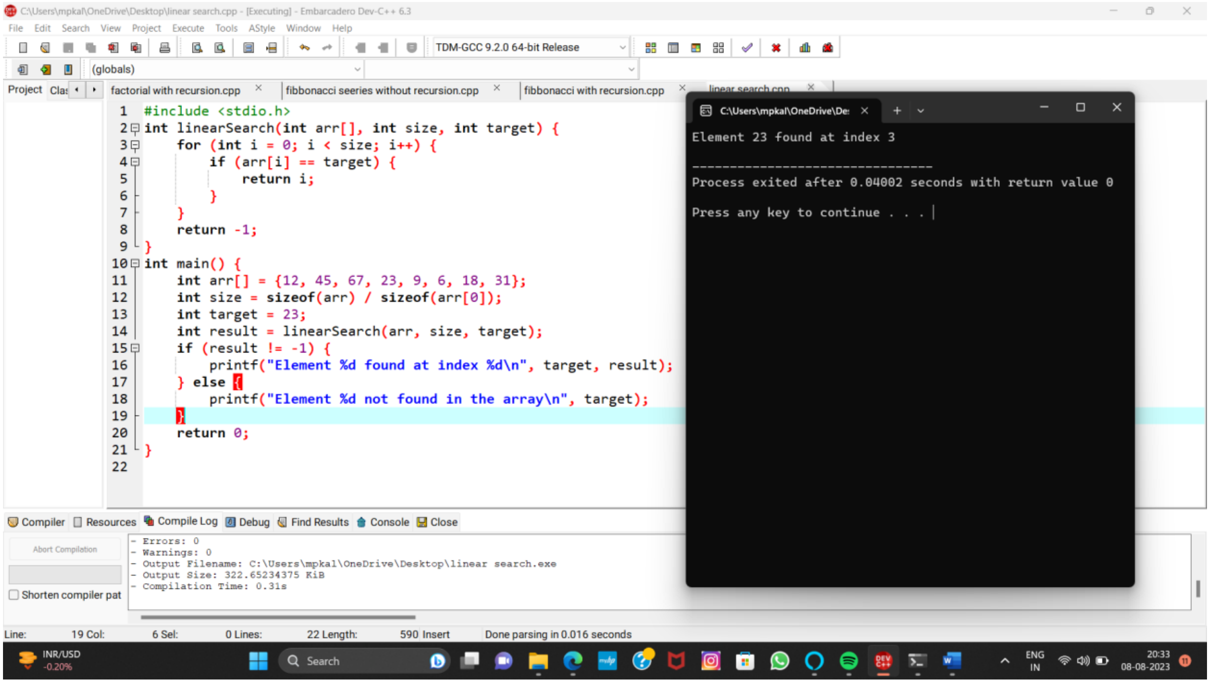
C:\Users\mpkal\OneDrive\Desktop\fibbonacci with recursion.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
factorial with recursion.cpp
fibbonacci seeries without recursion.cpp
fibbonacci with recursion.cpp
C:\Users\mpkal\OneDrive\De:
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Chat
Line: 26 Col: 1 Sel: 0 Lines: 26 Length: 526 Insert Done parsing in 0.015 seconds
31°C Mostly cloudy
Search
ENG IN
20:28 08-08-2023

```c
int fibonacci(int n) {
    if (n <= 0) {
        return 0;
    } else if (n == 1) {
        return 1;
    } else {
        return fibonacci(n - 1) + fibonacci(n - 2);
    }
}

int main() {
    int terms;
    printf("Enter the number of terms in the Fibonacci series: ");
    scanf("%d", &terms);

    printf("Fibonacci series:\n");
    for (int i = 0; i < terms; i++) {
        printf("%d ", fibonacci(i));
    }

    return 0;
}
```

```
Enter the number of terms in the Fibonacci series: 5
Fibonacci series:
0 1 1 2 3
--------------------------------
Process exited after 5.97 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\fibbonacci with recursion.exe
- Output Size: 323.013671875 KiB
- Compilation Time: 0.34s
```

11.linear search



C:\Users\mpkal\OneDrive\Desktop\linear search.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
factorial with recursion.cpp
fibbonacci seeries without recursion.cpp
fibbonacci with recursion.cpp
linear search.cpp
C:\Users\mpkal\OneDrive\De:
Compiler
Resources
Compile Log
Debug
Find Results
Console
Close
Abort Compilation
Shorten compiler pat
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20:33
08-08-2023

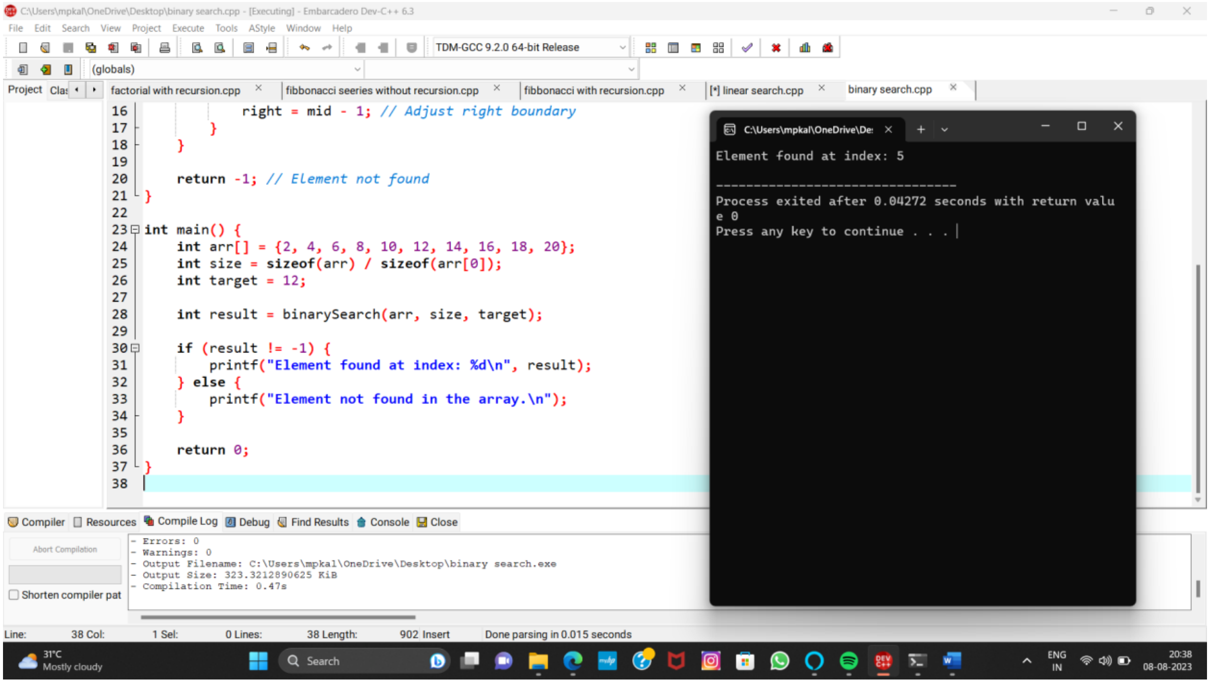
```c
#include <stdio.h>
int linearSearch(int arr[], int size, int target) {
    for (int i = 0; i < size; i++) {
        if (arr[i] == target) {
            return i;
        }
    }
    return -1;
}
int main() {
    int arr[] = {12, 45, 67, 23, 9, 6, 18, 31};
    int size = sizeof(arr) / sizeof(arr[0]);
    int target = 23;
    int result = linearSearch(arr, size, target);
    if (result != -1) {
        printf("Element %d found at index %d\n", target, result);
    } else {
        printf("Element %d not found in the array\n", target);
    }
    return 0;
}
```

```
Element 23 found at index 3

--------------------------------
Process exited after 0.04002 seconds with return value 0

Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\linear search.exe
- Output Size: 322.65234375 KiB
- Compilation Time: 0.31s
```

Line: 19 Col: 6 Sel: 0 Lines: 22 Length: 590 Insert Done parsing in 0.016 seconds

12.binary search



C:\Users\mpkal\OneDrive\Desktop\binary search.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
Project Clas
factorial with recursion.cpp
fibbonacci seeries without recursion.cpp
fibbonacci with recursion.cpp
[*] linear search.cpp
binary search.cpp
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
C:\Users\mpkal\OneDrive\De:
31°C
Mostly cloudy
Search
ENG
IN
20:38
08-08-2023

TDM-GCC 9.2.0 64-bit Release

```
            right = mid - 1; // Adjust right boundary
        }
    }

    return -1; // Element not found
}

int main() {
    int arr[] = {2, 4, 6, 8, 10, 12, 14, 16, 18, 20};
    int size = sizeof(arr) / sizeof(arr[0]);
    int target = 12;

    int result = binarySearch(arr, size, target);

    if (result != -1) {
        printf("Element found at index: %d\n", result);
    } else {
        printf("Element not found in the array.\n");
    }

    return 0;
}

```

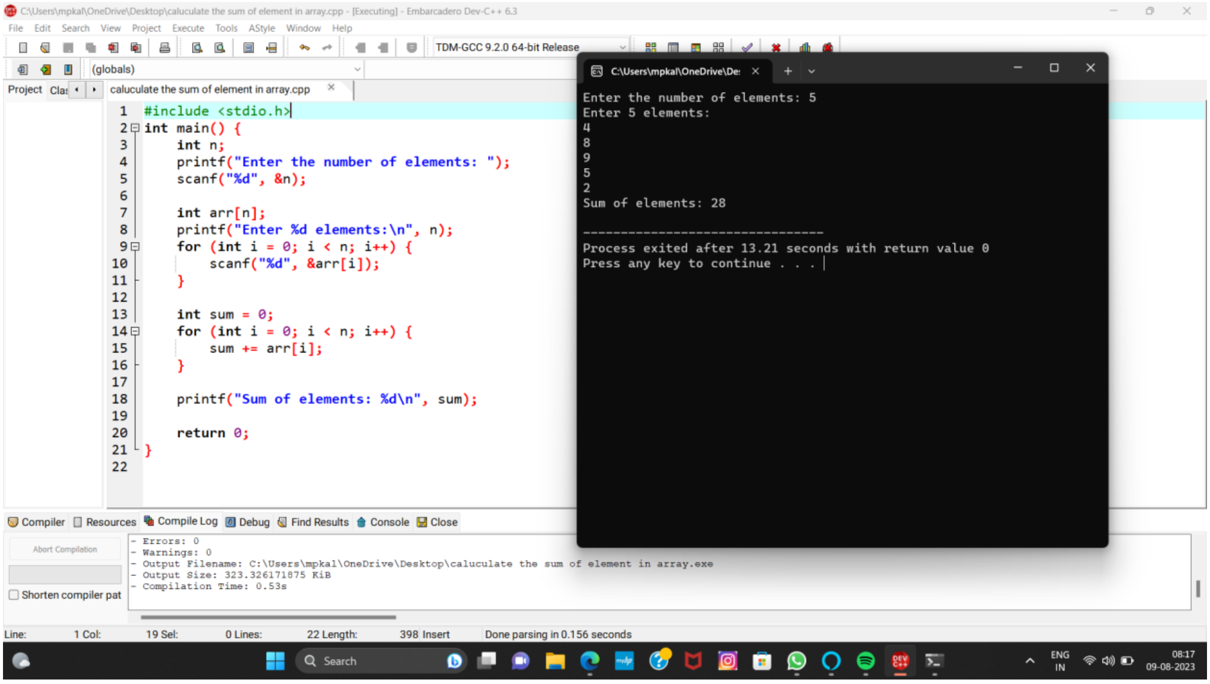
```
Element found at index: 5

--------------------------------
Process exited after 0.04272 seconds with return valu
e 0
Press any key to continue . . .
```

☐ Shorten compiler pat

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\binary search.exe
- Output Size: 323.3212890625 KiB
- Compilation Time: 0.47s
```

Line: 38 Col: 1 Sel: 0 Lines: 38 Length: 902 Insert Done parsing in 0.015 seconds

13.sum of elements in array



C:\Users\mpkal\OneDrive\Desktop\caluculate the sum of element in array.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
C:\Users\mpkal\OneDrive\De:
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Search
ENG IN
08:17
09-08-2023

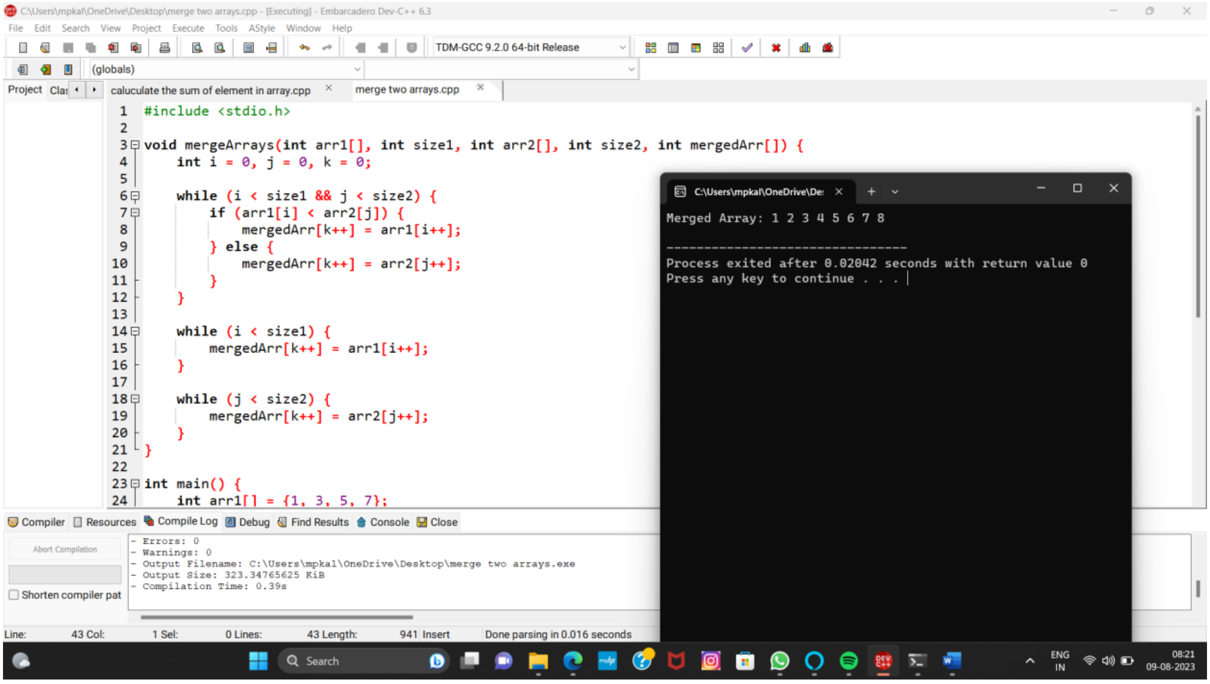
```c
#include <stdio.h>
int main() {
    int n;
    printf("Enter the number of elements: ");
    scanf("%d", &n);

    int arr[n];
    printf("Enter %d elements:\n", n);
    for (int i = 0; i < n; i++) {
        scanf("%d", &arr[i]);
    }

    int sum = 0;
    for (int i = 0; i < n; i++) {
        sum += arr[i];
    }

    printf("Sum of elements: %d\n", sum);

    return 0;
}

```

```
Enter the number of elements: 5
Enter 5 elements:
4
8
9
5
2
Sum of elements: 28

--------------------------------
Process exited after 13.21 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\caluculate the sum of element in array.exe
- Output Size: 323.326171875 KiB
- Compilation Time: 0.53s
```

Line: 1 Col: 19 Sel: 0 Lines: 22 Length: 398 Insert Done parsing in 0.156 seconds

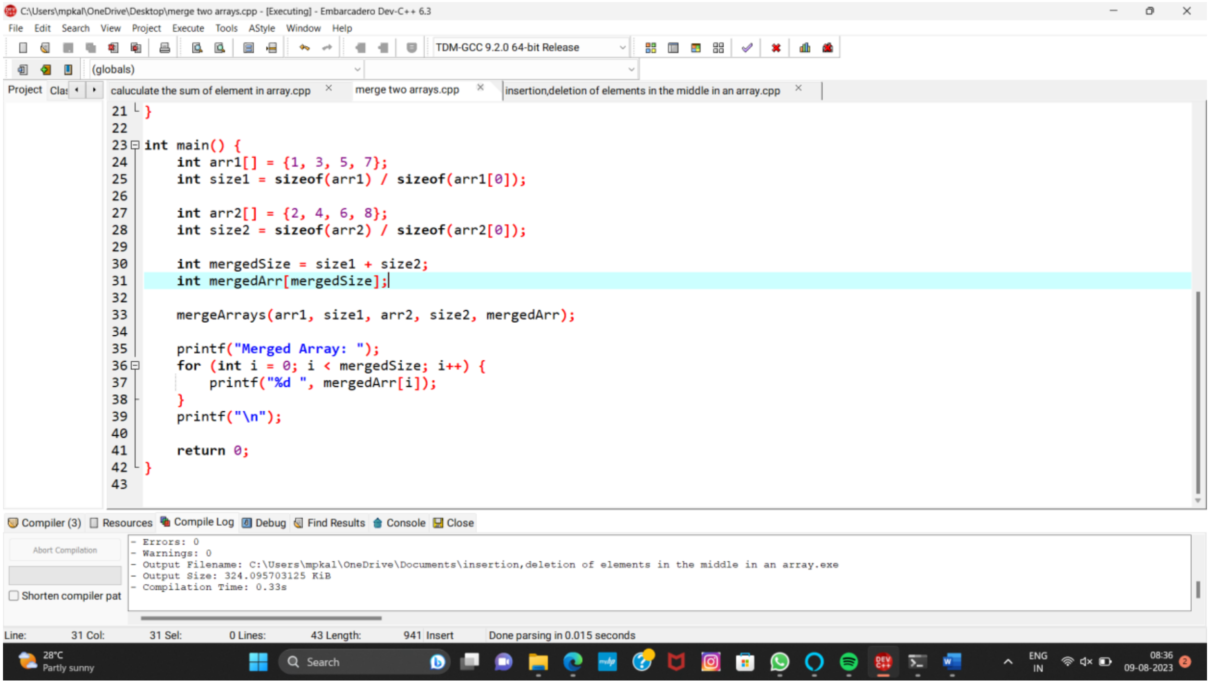
14.merge two arrays


C:\Users\mpkal\OneDrive\Desktop\merge two arrays.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
C:\Users\mpkal\OneDrive\De
Compiler Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 43 Col: 1 Sel: 0 Lines: 43 Length: 941 Insert Done parsing in 0.016 seconds
Search
ENG IN
08:21
09-08-2023

```c
#include <stdio.h>

void mergeArrays(int arr1[], int size1, int arr2[], int size2, int mergedArr[]) {
    int i = 0, j = 0, k = 0;

    while (i < size1 && j < size2) {
        if (arr1[i] < arr2[j]) {
            mergedArr[k++] = arr1[i++];
        } else {
            mergedArr[k++] = arr2[j++];
        }
    }

    while (i < size1) {
        mergedArr[k++] = arr1[i++];
    }

    while (j < size2) {
        mergedArr[k++] = arr2[j++];
    }
}

int main() {
    int arr1[] = {1, 3, 5, 7};
```

```
Merged Array: 1 2 3 4 5 6 7 8

--------------------------------
Process exited after 0.02042 seconds with return value 0
Press any key to continue . . .
```

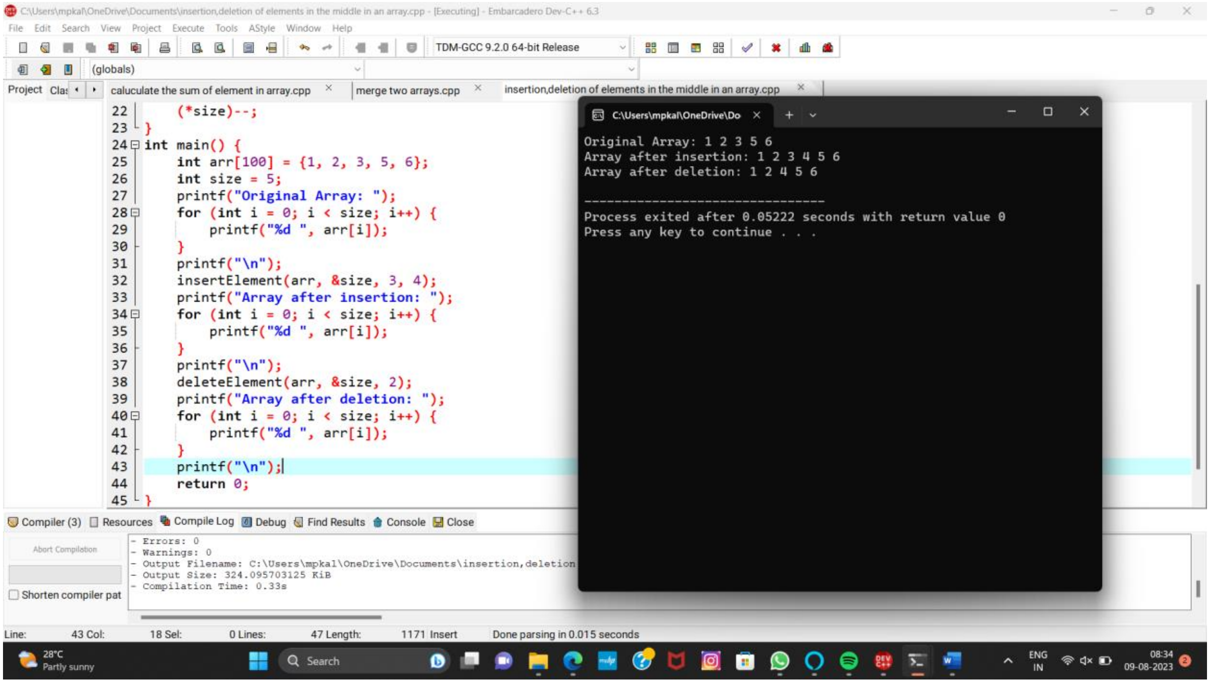
```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Desktop\merge two arrays.exe
- Output Size: 323.34765625 KiB
- Compilation Time: 0.39s
```


C:\Users\mpkal\OneDrive\Desktop\merge two arrays.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
insertion,deletion of elements in the middle in an array.cpp
Compiler (3) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 31 Col: 31 Sel: 0 Lines: 43 Length: 941 Insert Done parsing in 0.015 seconds
28°C
Partly sunny
Search
ENG IN
08:36
09-08-2023

```c
}

int main() {
    int arr1[] = {1, 3, 5, 7};
    int size1 = sizeof(arr1) / sizeof(arr1[0]);

    int arr2[] = {2, 4, 6, 8};
    int size2 = sizeof(arr2) / sizeof(arr2[0]);

    int mergedSize = size1 + size2;
    int mergedArr[mergedSize];

    mergeArrays(arr1, size1, arr2, size2, mergedArr);

    printf("Merged Array: ");
    for (int i = 0; i < mergedSize; i++) {
        printf("%d ", mergedArr[i]);
    }
    printf("\n");

    return 0;
}
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\insertion,deletion of elements in the middle in an array.exe
- Output Size: 324.095703125 KiB
- Compilation Time: 0.33s
```

15.insertion,deletion in the middle of array



C:\Users\mpkal\OneDrive\Documents\insertion,deletion of elements in the middle in an array.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
insertion,deletion of elements in the middle in an array.cpp
C:\Users\mpkal\OneDrive\Do
Compiler (3) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
28°C
Partly sunny
Search
ENG
IN
08:34
09-08-2023

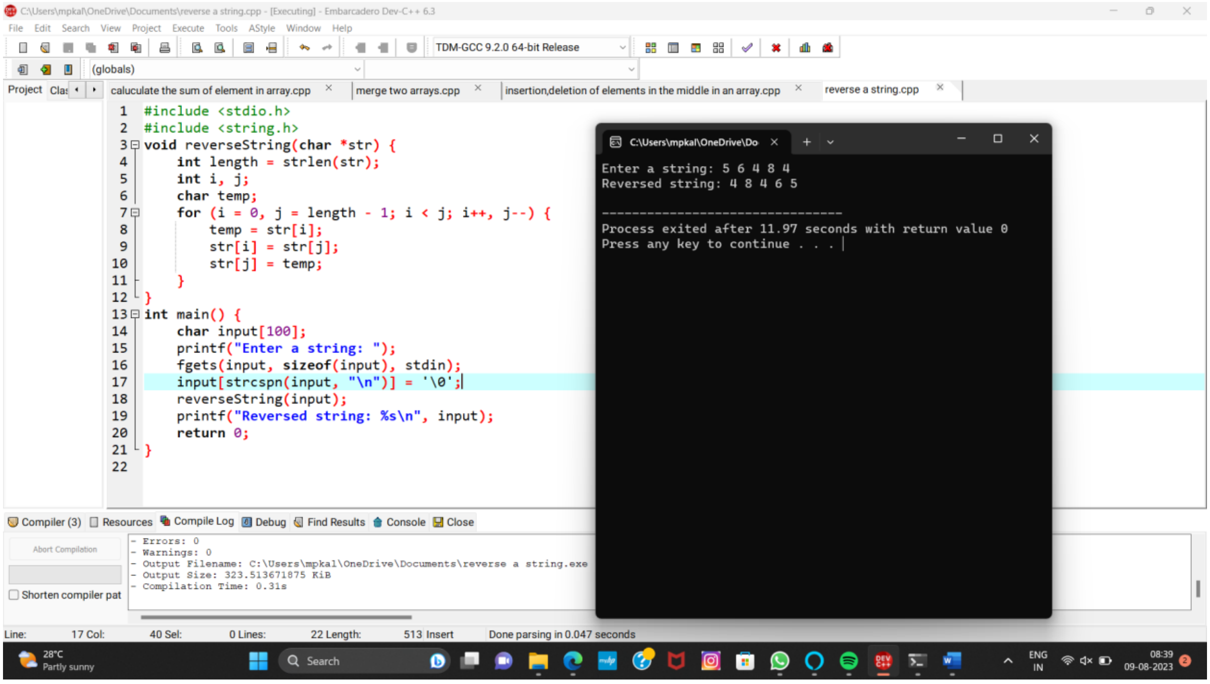
```
    (*size)--;
}
int main() {
    int arr[100] = {1, 2, 3, 5, 6};
    int size = 5;
    printf("Original Array: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }
    printf("\n");
    insertElement(arr, &size, 3, 4);
    printf("Array after insertion: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }
    printf("\n");
    deleteElement(arr, &size, 2);
    printf("Array after deletion: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }
    printf("\n");
    return 0;
}
```

```
Original Array: 1 2 3 5 6
Array after insertion: 1 2 3 4 5 6
Array after deletion: 1 2 4 5 6

--------------------------------
Process exited after 0.05222 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\insertion,deletion
- Output Size: 324.095703125 KiB
- Compilation Time: 0.33s
```

```
Line:    43 Col:    18 Sel:    0 Lines:    47 Length:    1171 Insert    Done parsing in 0.015 seconds
```

16.reverse a string


C:\Users\mpkal\OneDrive\Documents\reverse a string.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
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reverse a string.cpp
C:\Users\mpkal\OneDrive\Do
Compiler (3) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
28°C
Partly sunny
Search
ENG
IN
08:39
09-08-2023

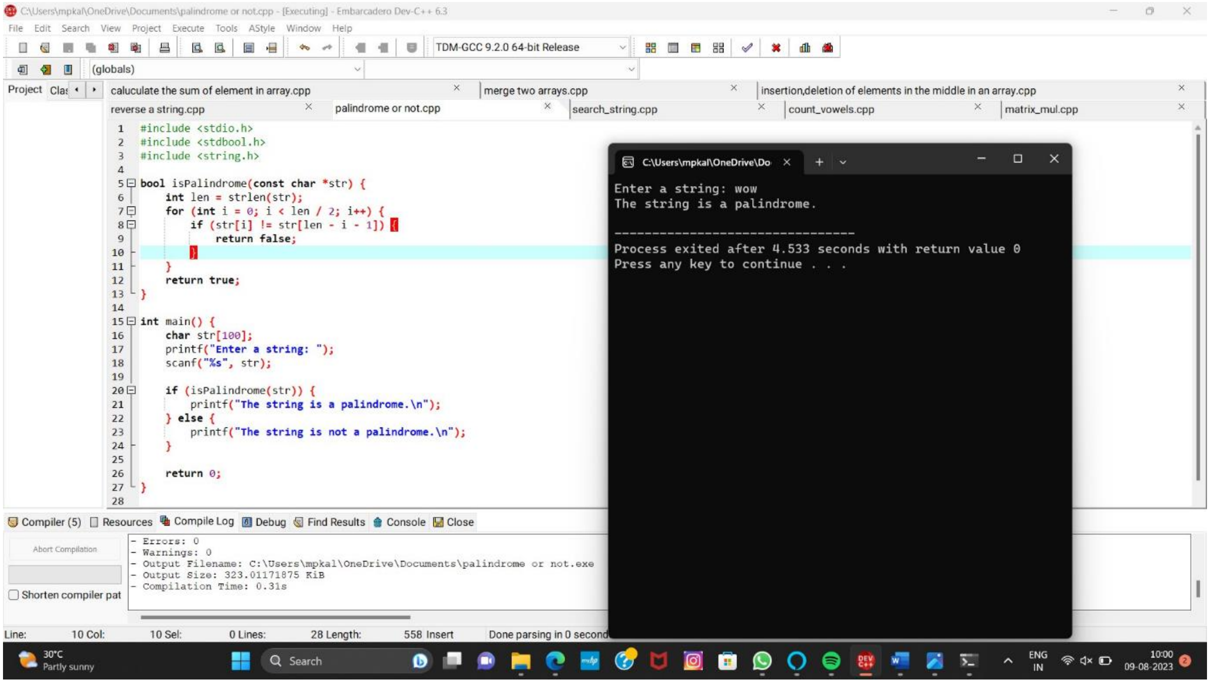
```c
#include <stdio.h>
#include <string.h>
void reverseString(char *str) {
    int length = strlen(str);
    int i, j;
    char temp;
    for (i = 0, j = length - 1; i < j; i++, j--) {
        temp = str[i];
        str[i] = str[j];
        str[j] = temp;
    }
}
int main() {
    char input[100];
    printf("Enter a string: ");
    fgets(input, sizeof(input), stdin);
    input[strcspn(input, "\n")] = '\0';
    reverseString(input);
    printf("Reversed string: %s\n", input);
    return 0;
}
```

```
Enter a string: 5 6 4 8 4
Reversed string: 4 8 4 6 5

--------------------------------
Process exited after 11.97 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\reverse a string.exe
- Output Size: 323.513671875 KiB
- Compilation Time: 0.31s
```

Line: 17 Col: 40 Sel: 0 Lines: 22 Length: 513 Insert Done parsing in 0.047 seconds

17.palindrome or not



C:\Users\mpkal\OneDrive\Documents\palindrome or not.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
insertion,deletion of elements in the middle in an array.cpp
reverse a string.cpp
palindrome or not.cpp
search_string.cpp
count_vowels.cpp
matrix_mul.cpp

```
#include <stdio.h>
#include <stdbool.h>
#include <string.h>

bool isPalindrome(const char *str) {
    int len = strlen(str);
    for (int i = 0; i < len / 2; i++) {
        if (str[i] != str[len - i - 1]) {
            return false;
        }
    }
    return true;
}

int main() {
    char str[100];
    printf("Enter a string: ");
    scanf("%s", str);

    if (isPalindrome(str)) {
        printf("The string is a palindrome.\n");
    } else {
        printf("The string is not a palindrome.\n");
    }

    return 0;
}
```

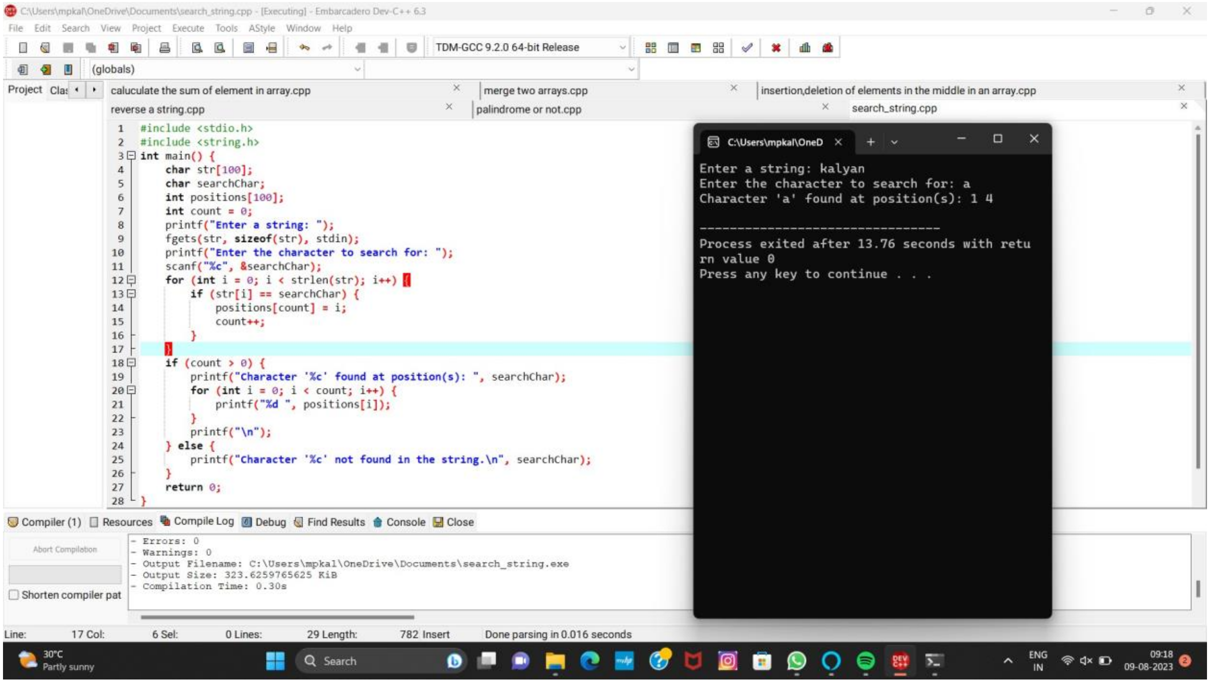
C:\Users\mpkal\OneDrive\Do

```
Enter a string: wow
The string is a palindrome.

--------------------------------
Process exited after 4.533 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\palindrome or not.exe
- Output Size: 323.01171875 KiB
- Compilation Time: 0.31s
```

Line: 10 Col: 10 Sel: 0 Lines: 28 Length: 558 Insert Done parsing in 0 second
30°C
Partly sunny
Search
ENG
IN
10:00
09-08-2023

18.search a particular character in a string


C:\Users\mpkal\OneDrive\Documents\search_string.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
insertion,deletion of elements in the middle in an array.cpp
reverse a string.cpp
palindrome or not.cpp
search_string.cpp
C:\Users\mpkal\OneD

```c
#include <stdio.h>
#include <string.h>
int main() {
    char str[100];
    char searchChar;
    int positions[100];
    int count = 0;
    printf("Enter a string: ");
    fgets(str, sizeof(str), stdin);
    printf("Enter the character to search for: ");
    scanf("%c", &searchChar);
    for (int i = 0; i < strlen(str); i++) {
        if (str[i] == searchChar) {
            positions[count] = i;
            count++;
        }
    }
    if (count > 0) {
        printf("Character '%c' found at position(s): ", searchChar);
        for (int i = 0; i < count; i++) {
            printf("%d ", positions[i]);
        }
        printf("\n");
    } else {
        printf("Character '%c' not found in the string.\n", searchChar);
    }
    return 0;
}
```

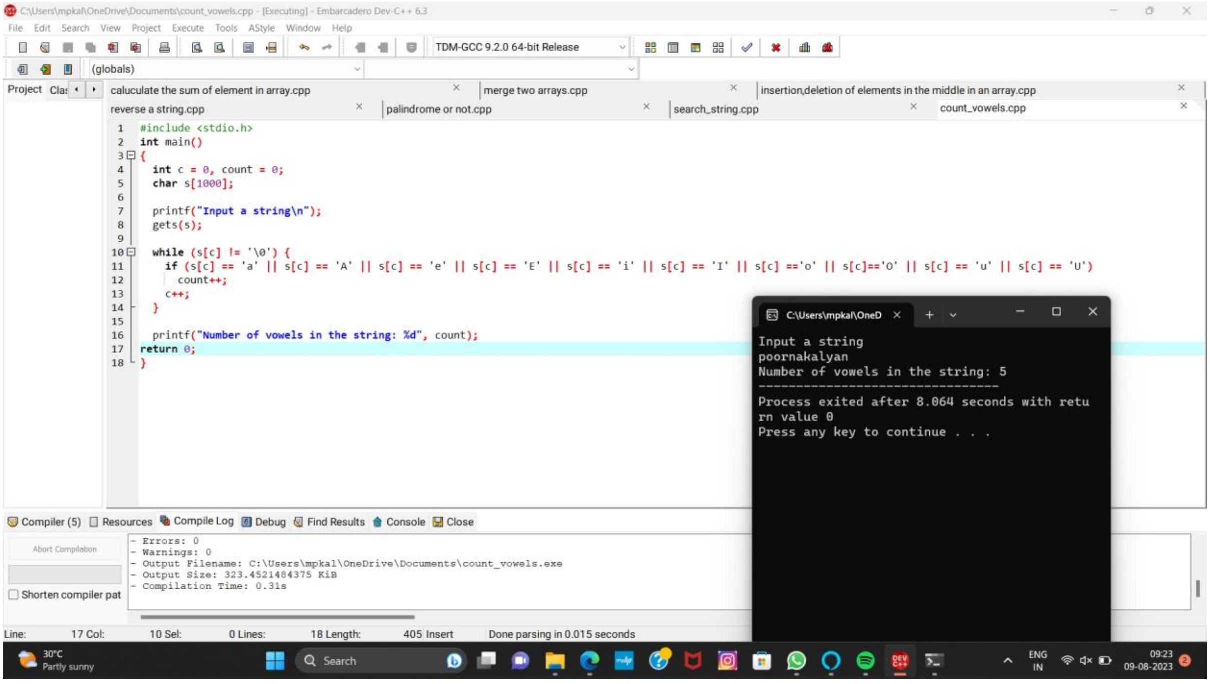
```
Enter a string: kalyan
Enter the character to search for: a
Character 'a' found at position(s): 1 4

--------------------------------
Process exited after 13.76 seconds with retu
rn value 0
Press any key to continue . . .
```

Compiler (1) Resources Compile Log Debug Find Results Console Close
Abort Compilation
□ Shorten compiler pat

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\search_string.exe
- Output Size: 323.6259765625 KiB
- Compilation Time: 0.30s
```

Line: 17 Col: 6 Sel: 0 Lines: 29 Length: 782 Insert Done parsing in 0.016 seconds
30°C
Partly sunny
Search
ENG
IN
09:18
09-08-2023

19.count vowels


C:\Users\mpkal\OneDrive\Documents\count_vowels.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
caluculate the sum of element in array.cpp
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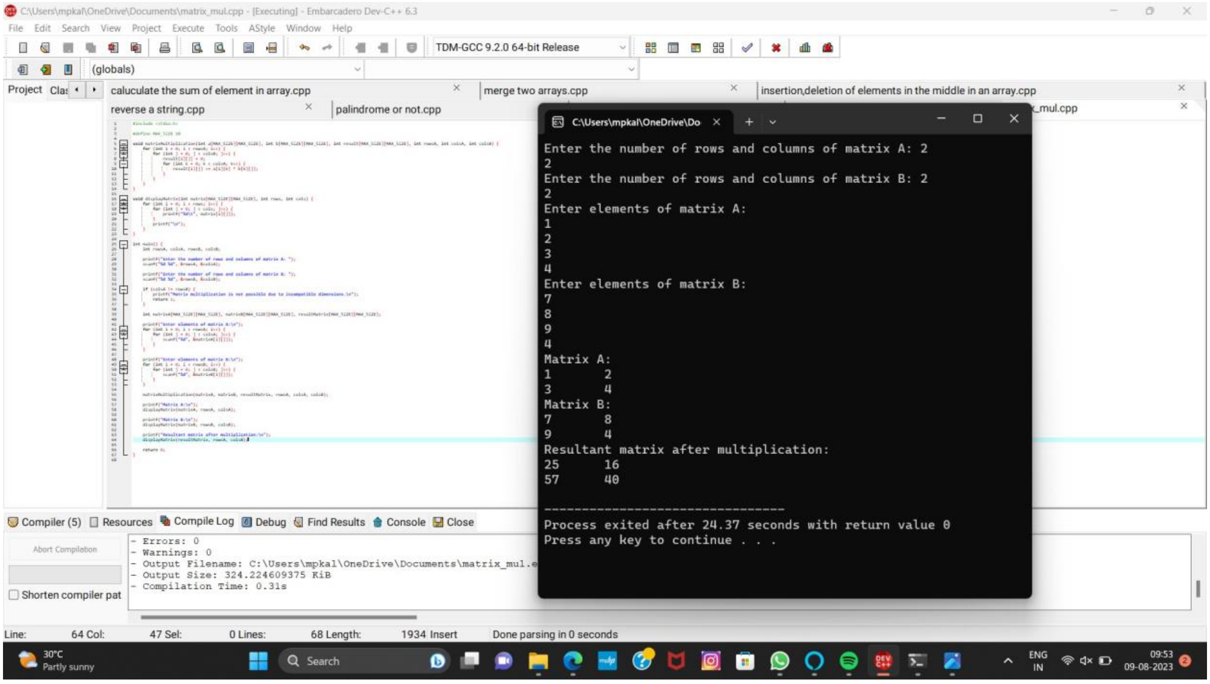
palindrome or not.cpp
search_string.cpp
count_vowels.cpp
C:\Users\mpkal\OneD
Compiler (5) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 17 Col: 10 Sel: 0 Lines: 18 Length: 405 Insert Done parsing in 0.015 seconds
30°C
Partly sunny
Search
ENG
IN
09:23
09-08-2023

```c
#include <stdio.h>
int main()
{
  int c = 0, count = 0;
  char s[1000];

  printf("Input a string\n");
  gets(s);

  while (s[c] != '\0') {
    if (s[c] == 'a' || s[c] == 'A' || s[c] == 'e' || s[c] == 'E' || s[c] == 'i' || s[c] == 'I' || s[c] =='o' || s[c]=='O' || s[c] == 'u' || s[c] == 'U')
      count++;
    c++;
  }

  printf("Number of vowels in the string: %d", count);
return 0;
}
```

```
Input a string
poornakalyan
Number of vowels in the string: 5
--------------------------------
Process exited after 8.064 seconds with retu
rn value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\count_vowels.exe
- Output Size: 323.4521484375 KiB
- Compilation Time: 0.31s
```

20.matrix multiplication



```
Enter the number of rows and columns of matrix A: 2
2
Enter the number of rows and columns of matrix B: 2
2
Enter elements of matrix A:
1
2
3
4
Enter elements of matrix B:
7
8
9
4
Matrix A:
1       2
3       4
Matrix B:
7       8
9       4
Resultant matrix after multiplication:
25      16
57      40

--------------------------------
Process exited after 24.37 seconds with return value 0
Press any key to continue . . .
```

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\mpkal\OneDrive\Documents\matrix_mul.e
- Output Size: 324.224609375 KiB
- Compilation Time: 0.31s
```

C:\Users\mpkal\OneDrive\Documents\matrix_mul.cpp - [Executing] - Embarcadero Dev-C++ 6.3
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 9.2.0 64-bit Release
(globals)
Project Clas
caluculate the sum of element in array.cpp
merge two arrays.cpp
insertion,deletion of elements in the middle in an array.cpp
reverse a string.cpp
palindrome or not.cpp
_mul.cpp
C:\Users\mpkal\OneDrive\Do
Compiler (5) Resources Compile Log Debug Find Results Console Close
Abort Compilation
Shorten compiler pat
Line: 64 Col: 47 Sel: 0 Lines: 68 Length: 1934 Insert Done parsing in 0 seconds
30°C Partly sunny
Search
ENG IN
09:53 09-08-2023