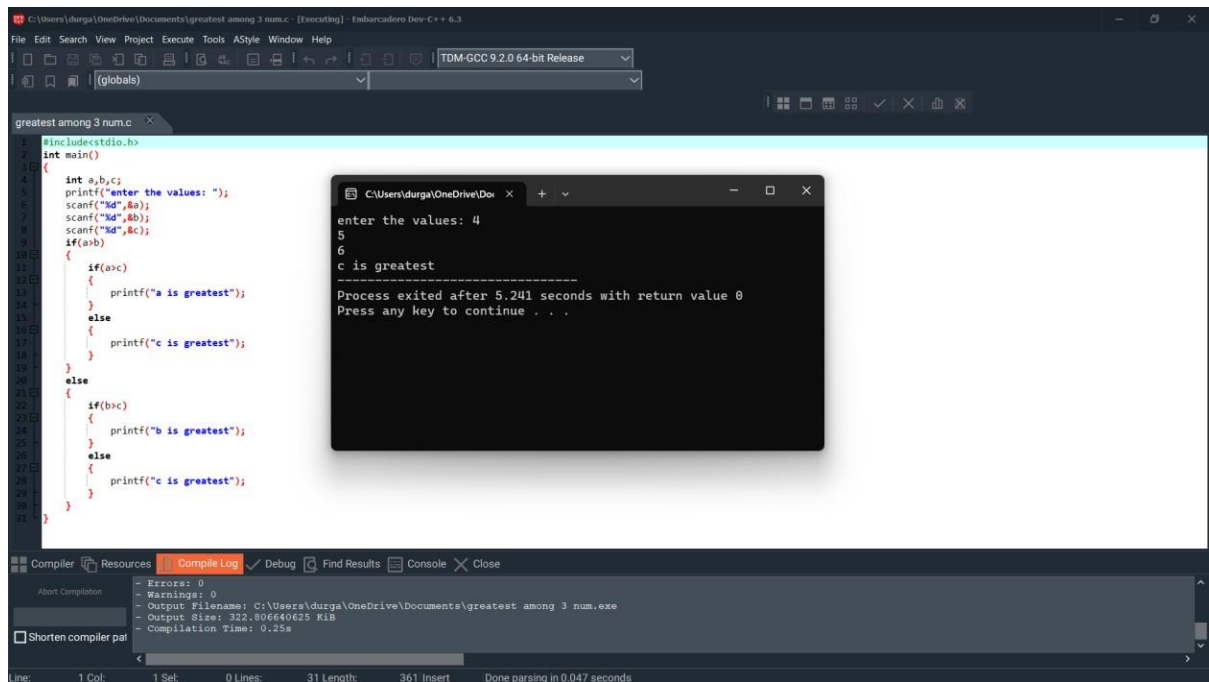


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Reg no:192210416

1)c program to find greatest number



The screenshot shows an IDE window titled "greatest among 3 num.c". The code is as follows:

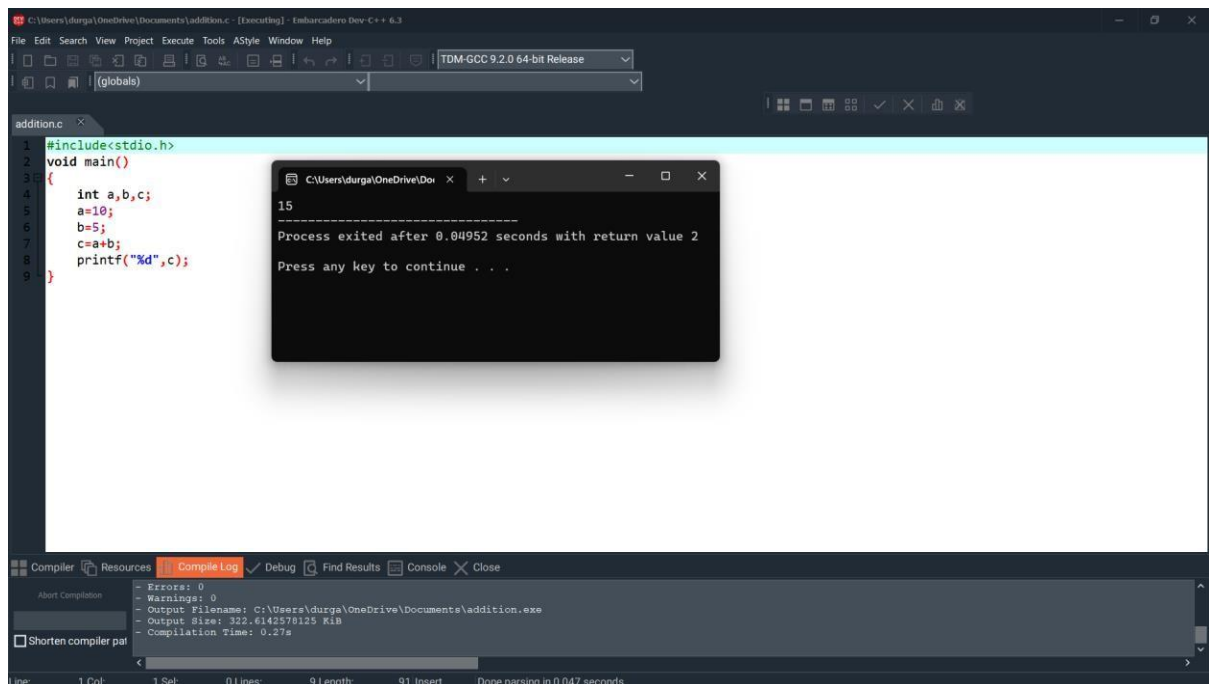
```
#include<stdio.h>
int main()
{
    int a,b,c;
    printf("enter the values: ");
    scanf("%d",&a);
    scanf("%d",&b);
    scanf("%d",&c);
    if(a>b)
    {
        if(a>c)
        {
            printf("a is greatest");
        }
        else
        {
            printf("c is greatest");
        }
    }
    else
    {
        if(b>c)
        {
            printf("b is greatest");
        }
        else
        {
            printf("c is greatest");
        }
    }
}
```

The execution output window shows the following text:

```
enter the values: 4
5
6
c is greatest
-----
Process exited after 5.241 seconds with return value 0
Press any key to continue . . .
```

The compiler output at the bottom shows 0 errors and 0 warnings. The output filename is "C:\Users\durga\OneDrive\Documents\greatest among 3 num.exe", the output size is 322.806640625 KiB, and the compilation time is 0.25s.

2)c program to add 2 numbers



The screenshot shows an IDE window titled "addition.c". The code is as follows:

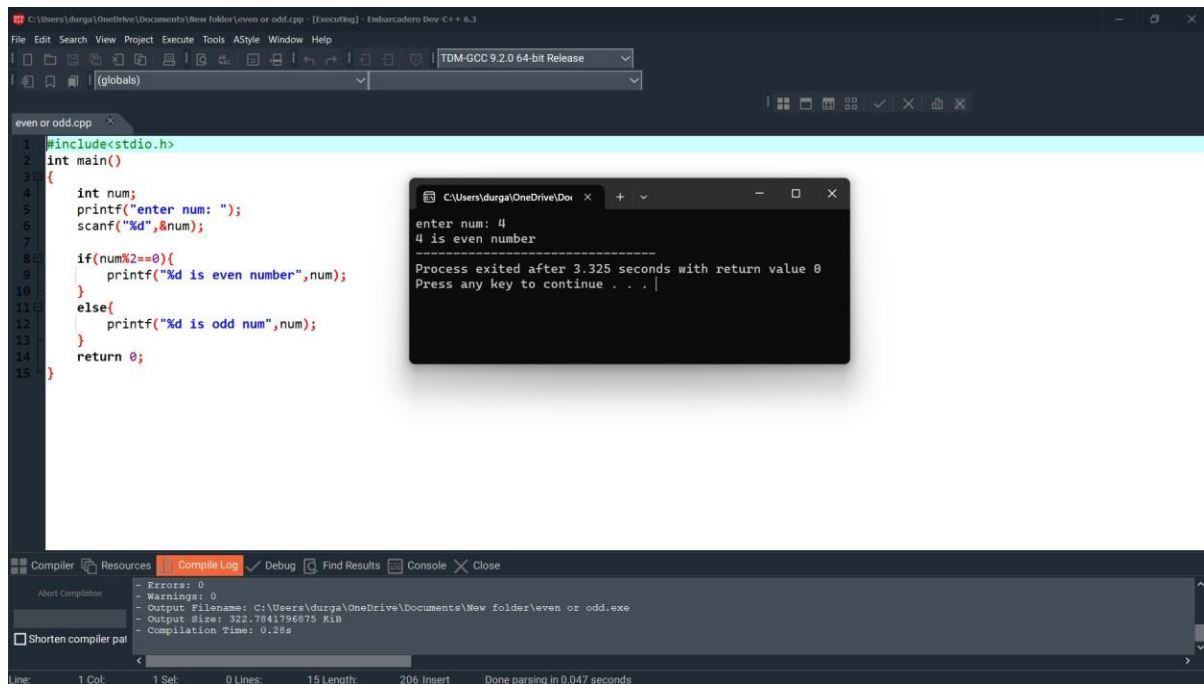
```
#include<stdio.h>
void main()
{
    int a,b,c;
    a=10;
    b=5;
    c=a+b;
    printf("%d",c);
}
```

The execution output window shows the following text:

```
15
-----
Process exited after 0.04952 seconds with return value 2
Press any key to continue . . .
```

The compiler output at the bottom shows 0 errors and 0 warnings. The output filename is "C:\Users\durga\OneDrive\Documents\addition.exe", the output size is 322.6142578125 KiB, and the compilation time is 0.27s.

### 3)c program to check the given number is even or odd

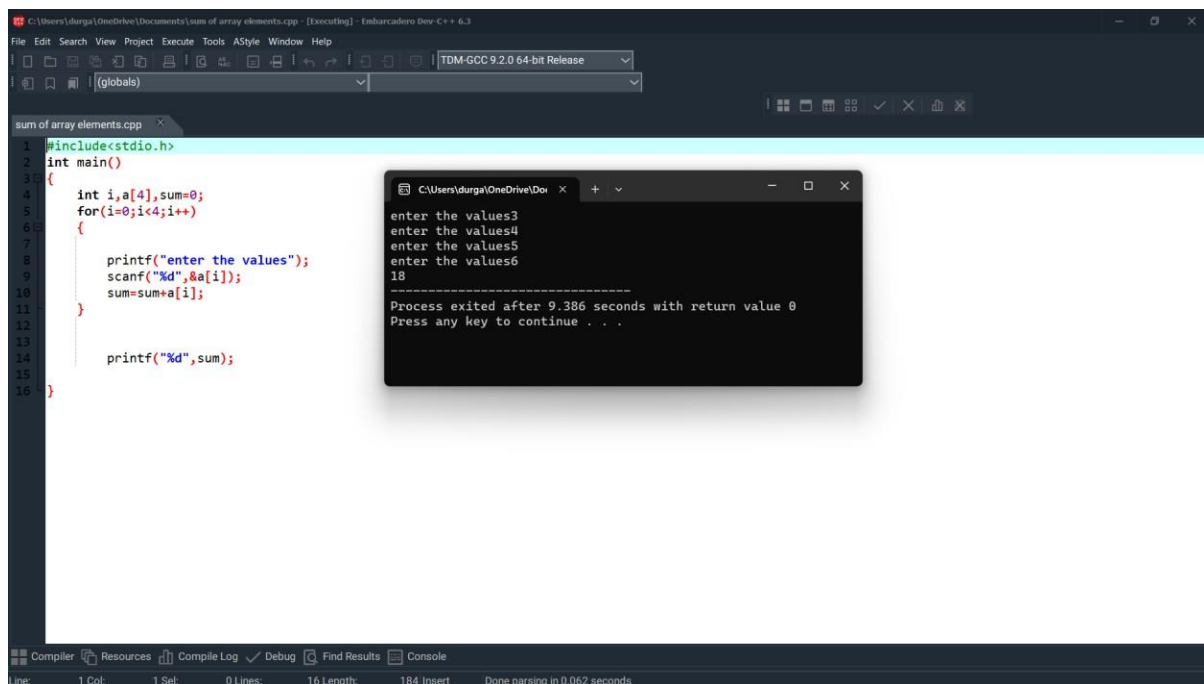


```
1 #include<stdio.h>
2 int main()
3 {
4     int num;
5     printf("enter num: ");
6     scanf("%d",&num);
7
8     if(num%2==0){
9         printf("%d is even number",num);
10    }
11    else{
12        printf("%d is odd num",num);
13    }
14    return 0;
15 }
```

```
enter num: 4
4 is even number
-----
Process exited after 3.325 seconds with return value 0
Press any key to continue . . .
```

Compiler: TDM-GCC 9.2.0 64-bit Release  
Output File: C:\Users\durga\OneDrive\Documents\New folder\even or odd.exe  
Output Size: 322.7841796875 KiB  
Compilation Time: 0.28s

### 4)c program to write sum of arrays

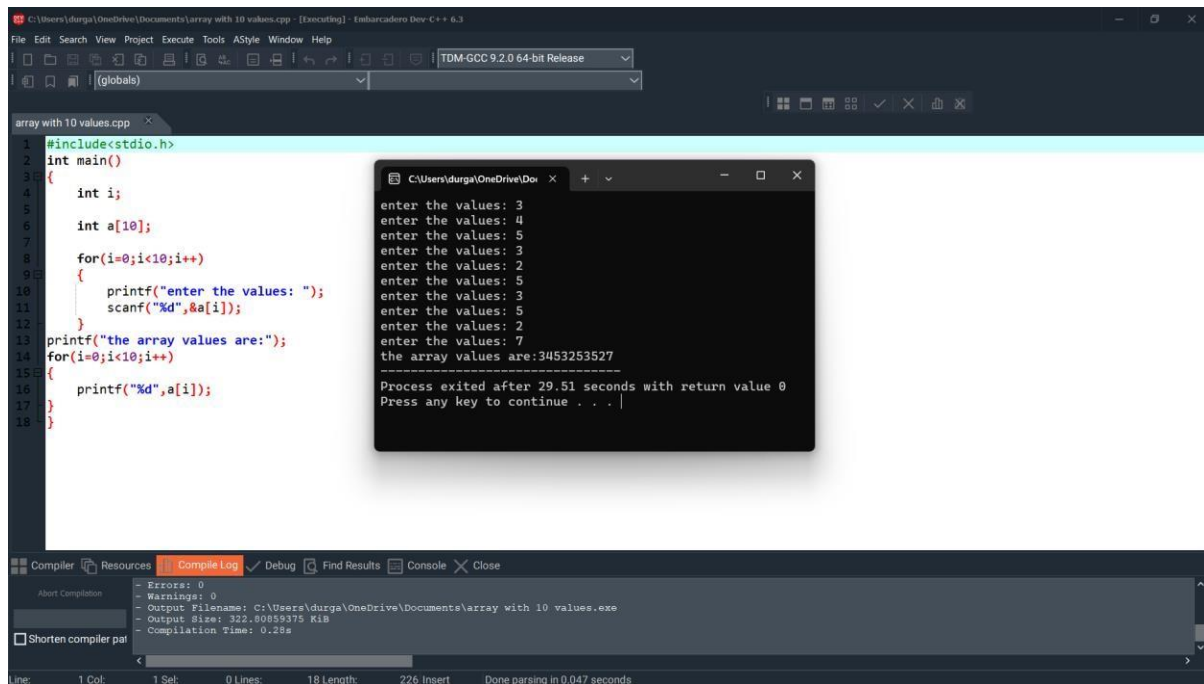


```
1 #include<stdio.h>
2 int main()
3 {
4     int i,a[4],sum=0;
5     for(i=0;i<4;i++)
6     {
7         printf("enter the values");
8         scanf("%d",&a[i]);
9         sum=sum+a[i];
10    }
11
12    printf("%d",sum);
13
14
15
16 }
```

```
enter the values3
enter the values4
enter the values5
enter the values6
18
-----
Process exited after 9.386 seconds with return value 0
Press any key to continue . . .
```

Compiler: TDM-GCC 9.2.0 64-bit Release  
Output File: C:\Users\durga\OneDrive\Documents\sum of array elements.exe  
Output Size: 322.7841796875 KiB  
Compilation Time: 0.28s

## 5)c program to print array with 10 values



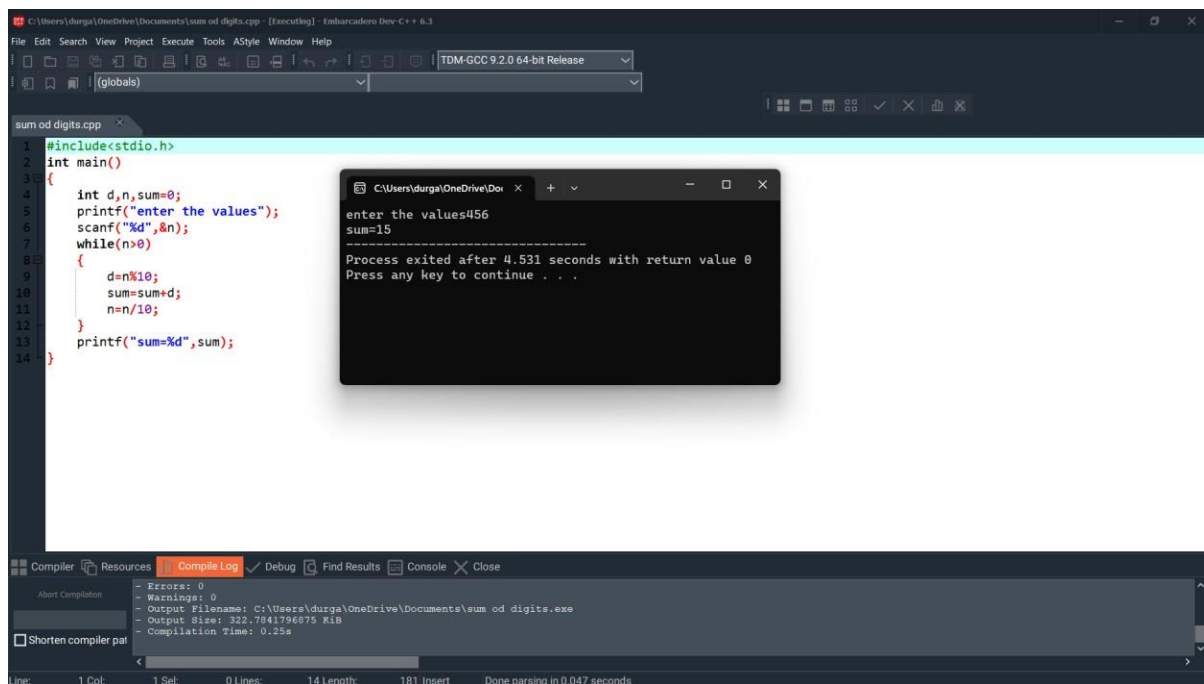
The screenshot shows an IDE with a C program named 'array with 10 values.cpp'. The program prompts the user to enter 10 values, which are then printed. The execution window shows the input values: 3, 4, 5, 3, 2, 5, 3, 5, 2, 7. The array values are printed as: 3453253527. The compiler output shows no errors or warnings.

```
1 #include<stdio.h>
2 int main()
3 {
4     int i;
5     int a[10];
6     for(i=0;i<10;i++)
7     {
8         printf("enter the values: ");
9         scanf("%d",&a[i]);
10    }
11    printf("the array values are:");
12    for(i=0;i<10;i++)
13    {
14        printf("%d",a[i]);
15    }
16 }
```

enter the values: 3  
enter the values: 4  
enter the values: 5  
enter the values: 3  
enter the values: 2  
enter the values: 5  
enter the values: 3  
enter the values: 5  
enter the values: 2  
enter the values: 7  
the array values are:3453253527  
-----  
Process exited after 29.51 seconds with return value 0  
Press any key to continue . . .

Compiler Output:  
- Errors: 0  
- Warnings: 0  
- Output Filename: C:\Users\durga\OneDrive\Documents\array with 10 values.exe  
- Output Size: 322.80859375 KiB  
- Compilation Time: 0.28s

## 6)c program to find sum of digits



The screenshot shows an IDE with a C program named 'sum od digits.cpp'. The program prompts the user to enter a number, which is then processed to find the sum of its digits. The execution window shows the input value: 456, and the sum: 15. The compiler output shows no errors or warnings.

```
1 #include<stdio.h>
2 int main()
3 {
4     int d,n,sum=0;
5     printf("enter the values");
6     scanf("%d",&n);
7     while(n>0)
8     {
9         d=n%10;
10        sum=sum+d;
11        n=n/10;
12    }
13    printf("sum=%d",sum);
14 }
```

enter the values456  
sum=15  
-----  
Process exited after 4.531 seconds with return value 0  
Press any key to continue . . .

Compiler Output:  
- Errors: 0  
- Warnings: 0  
- Output Filename: C:\Users\durga\OneDrive\Documents\sum od digits.exe  
- Output Size: 322.7841796875 KiB  
- Compilation Time: 0.25s

7)c program to get 5 values from user and sum of it

The screenshot shows a C++ IDE with a file named "5 values from user and sum of it.cpp". The code is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n,sum=0;
5     i=1;
6     while(i<=5)
7     {
8         printf("enter the values");
9         scanf("%d",&n);
10        sum=sum+n;
11        i++;
12    }
13    printf("sum of values=%d",sum);
14    return 0;
15 }
```

A terminal window shows the execution output:

```
enter the values5
enter the values6
enter the values7
enter the values8
enter the values9
sum of values=34
-----
Process exited after 4.903 seconds with return value 0
Press any key to continue . . .
```

The IDE's compiler log at the bottom shows no errors or warnings, and the compilation time is 0.27s.

8)c program to print first n numbers in reverse using do while

The screenshot shows a C++ IDE with a file named "first n numbers in rev using do while.cpp". The code is as follows:

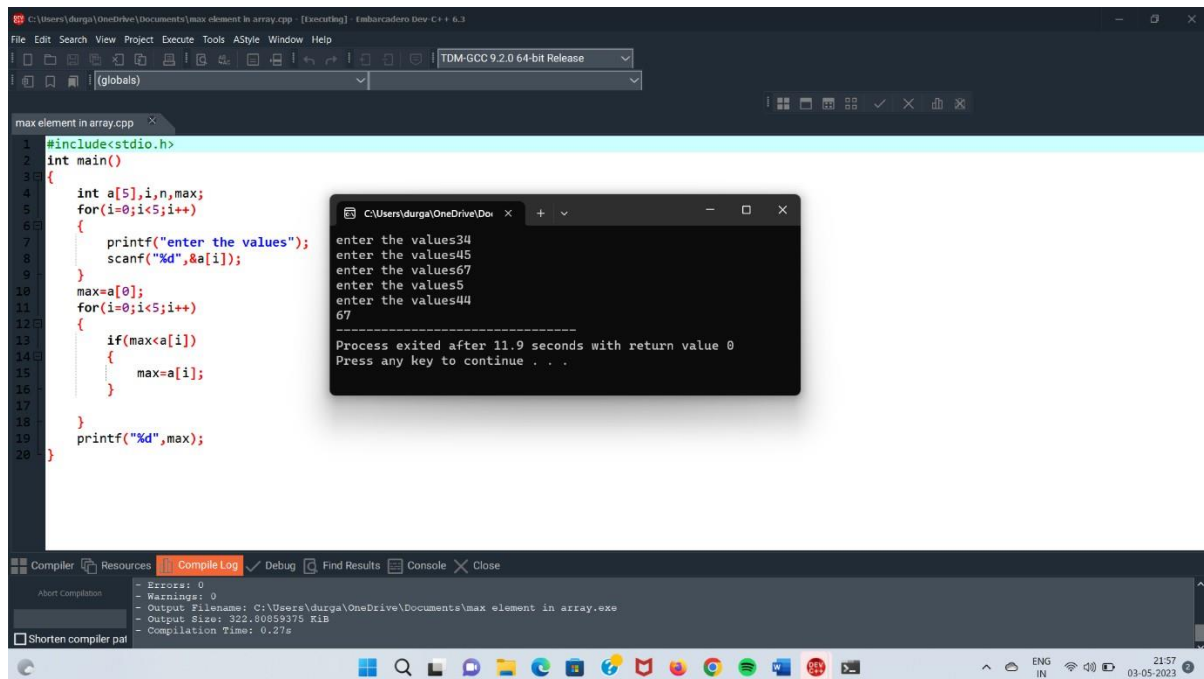
```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n;
5     printf("enter the no.of values: ");
6     scanf("%d",&n);
7
8     do{
9         printf("%d",n);
10        n--;
11    }while(n>0);
12 }
```

A terminal window shows the execution output:

```
enter the no.of values: 5
54321
-----
Process exited after 2.28 seconds with return value 0
Press any key to continue . . .
```

The IDE's compiler log at the bottom shows no errors or warnings, and the compilation time is 0.30s.

## 9)c program to print max element in array



The screenshot shows a C program in a code editor and its execution in a terminal window. The program is titled "max element in array.cpp".

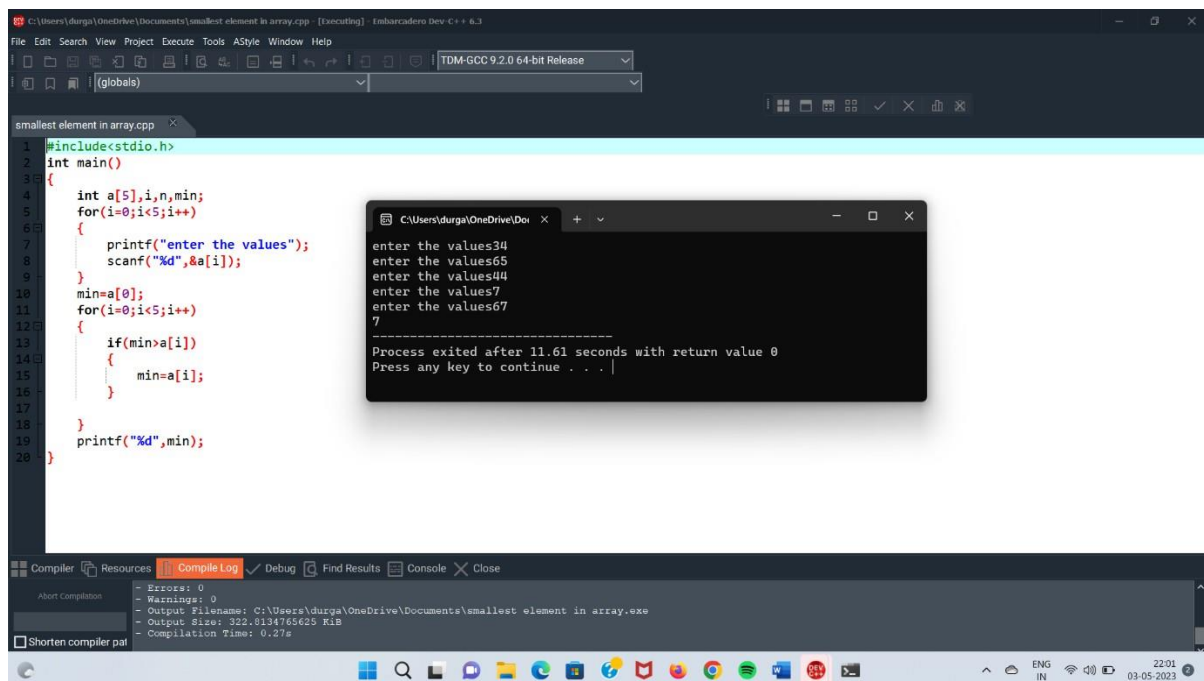
```
1 #include<stdio.h>
2 int main()
3 {
4     int a[5],i,n,max;
5     for(i=0;i<5;i++)
6     {
7         printf("enter the values");
8         scanf("%d",&a[i]);
9     }
10    max=a[0];
11    for(i=1;i<5;i++)
12    {
13        if(max<a[i])
14        {
15            max=a[i];
16        }
17    }
18    printf("%d",max);
19 }
20 }
```

The terminal window shows the following input and output:

```
enter the values34
enter the values45
enter the values67
enter the values5
enter the values44
67
-----
Process exited after 11.9 seconds with return value 0
Press any key to continue . . .
```

The compiler output at the bottom shows no errors or warnings, and the output filename is "C:\Users\durga\OneDrive\Documents\max element in array.exe".

## 10) c program to print min element in array



The screenshot shows a C program in a code editor and its execution in a terminal window. The program is titled "smallest element in array.cpp".

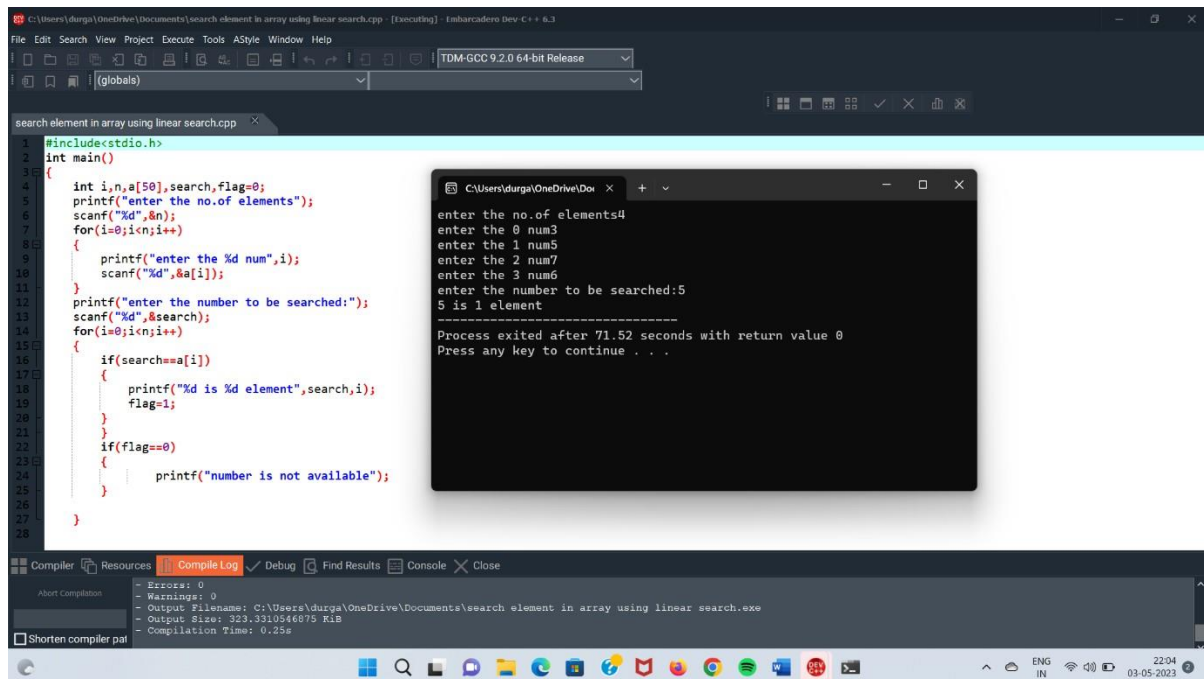
```
1 #include<stdio.h>
2 int main()
3 {
4     int a[5],i,n,min;
5     for(i=0;i<5;i++)
6     {
7         printf("enter the values");
8         scanf("%d",&a[i]);
9     }
10    min=a[0];
11    for(i=1;i<5;i++)
12    {
13        if(min>a[i])
14        {
15            min=a[i];
16        }
17    }
18    printf("%d",min);
19 }
20 }
```

The terminal window shows the following input and output:

```
enter the values34
enter the values65
enter the values44
enter the values7
enter the values67
7
-----
Process exited after 11.61 seconds with return value 0
Press any key to continue . . .
```

The compiler output at the bottom shows no errors or warnings, and the output filename is "C:\Users\durga\OneDrive\Documents\smallest element in array.exe".

## 11) search element in array using linear search



The screenshot shows an IDE with a C++ program for linear search. The code is as follows:

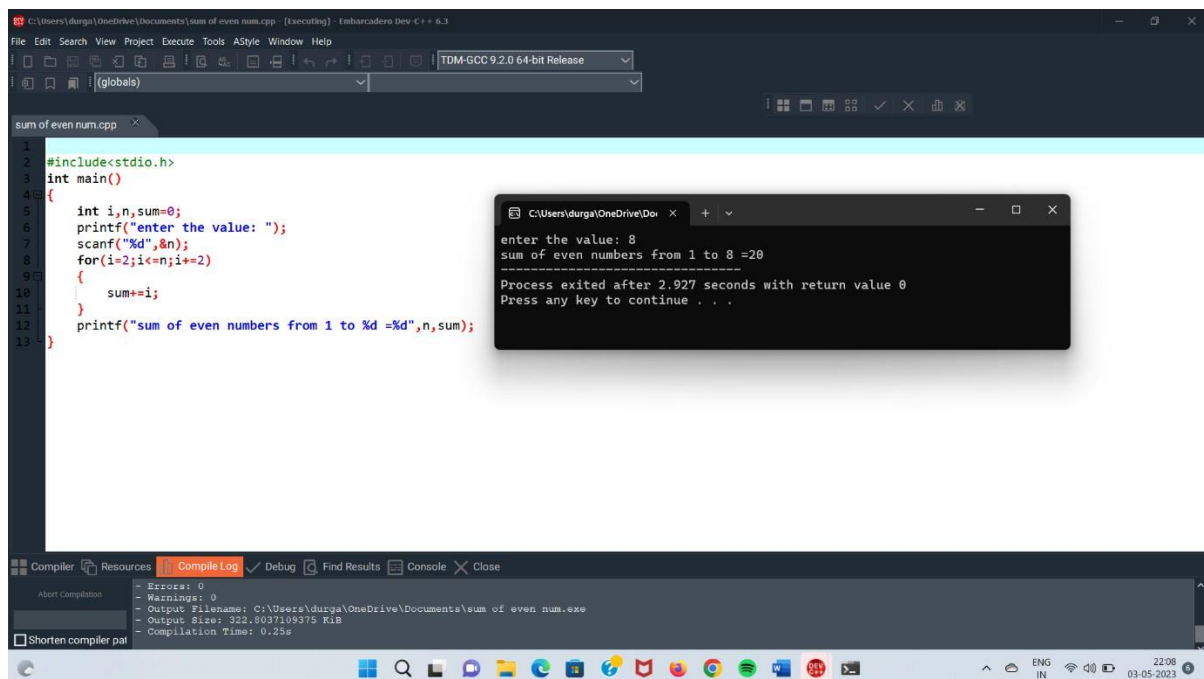
```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n,a[50],search,flag=0;
5     printf("enter the no. of elements");
6     scanf("%d",&n);
7     for(i=0;i<n;i++)
8     {
9         printf("enter the %d num",i);
10        scanf("%d",&a[i]);
11    }
12    printf("enter the number to be searched:");
13    scanf("%d",&search);
14    for(i=0;i<n;i++)
15    {
16        if(search==a[i])
17        {
18            printf("%d is %d element",search,i);
19            flag=1;
20        }
21    }
22    if(flag==0)
23    {
24        printf("number is not available");
25    }
26 }
27
```

The execution output is shown in a separate window:

```
enter the no. of elements 4
enter the 0 num 3
enter the 1 num 5
enter the 2 num 7
enter the 3 num 6
enter the number to be searched: 5
5 is 1 element
-----
Process exited after 71.52 seconds with return value 0
Press any key to continue . . .
```

The compiler log at the bottom shows no errors or warnings.

## 12) c program to find sum of even number from 1 to n



The screenshot shows an IDE with a C program to find the sum of even numbers from 1 to n. The code is as follows:

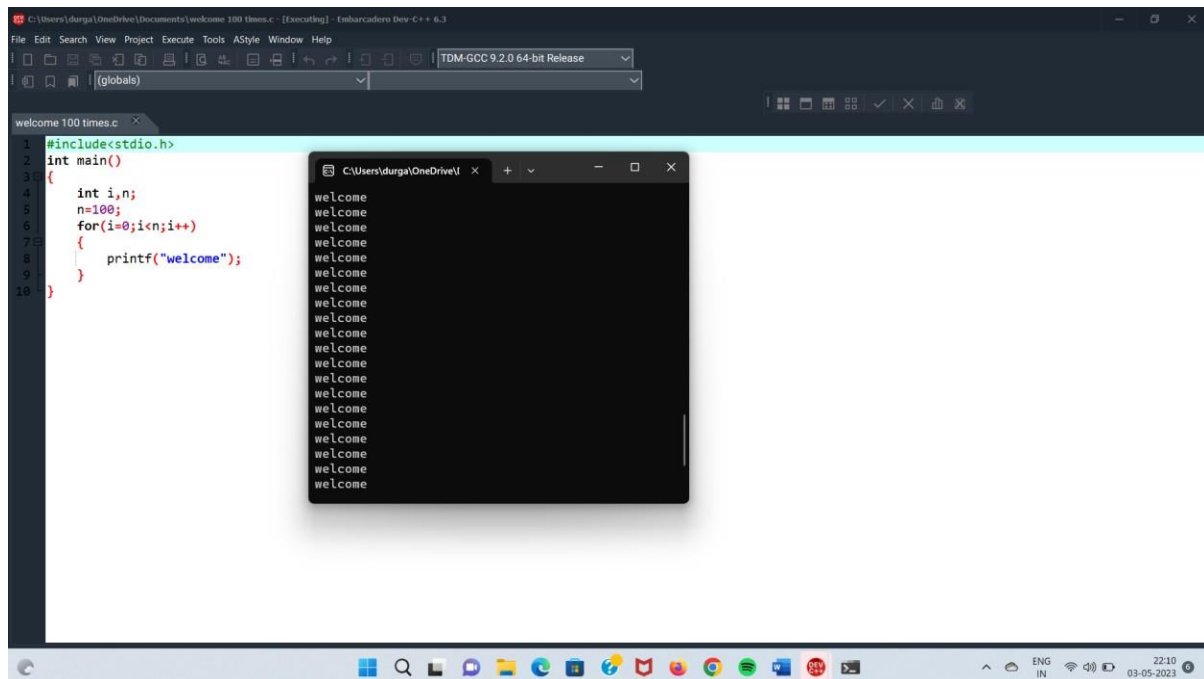
```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n,sum=0;
5     printf("enter the value: ");
6     scanf("%d",&n);
7     for(i=2;i<=n;i+=2)
8     {
9         sum+=i;
10    }
11    printf("sum of even numbers from 1 to %d =%d",n,sum);
12 }
13
```

The execution output is shown in a separate window:

```
enter the value: 8
sum of even numbers from 1 to 8 =20
-----
Process exited after 2.927 seconds with return value 0
Press any key to continue . . .
```

The compiler log at the bottom shows no errors or warnings.

### 13)c program to print welcome 100 times

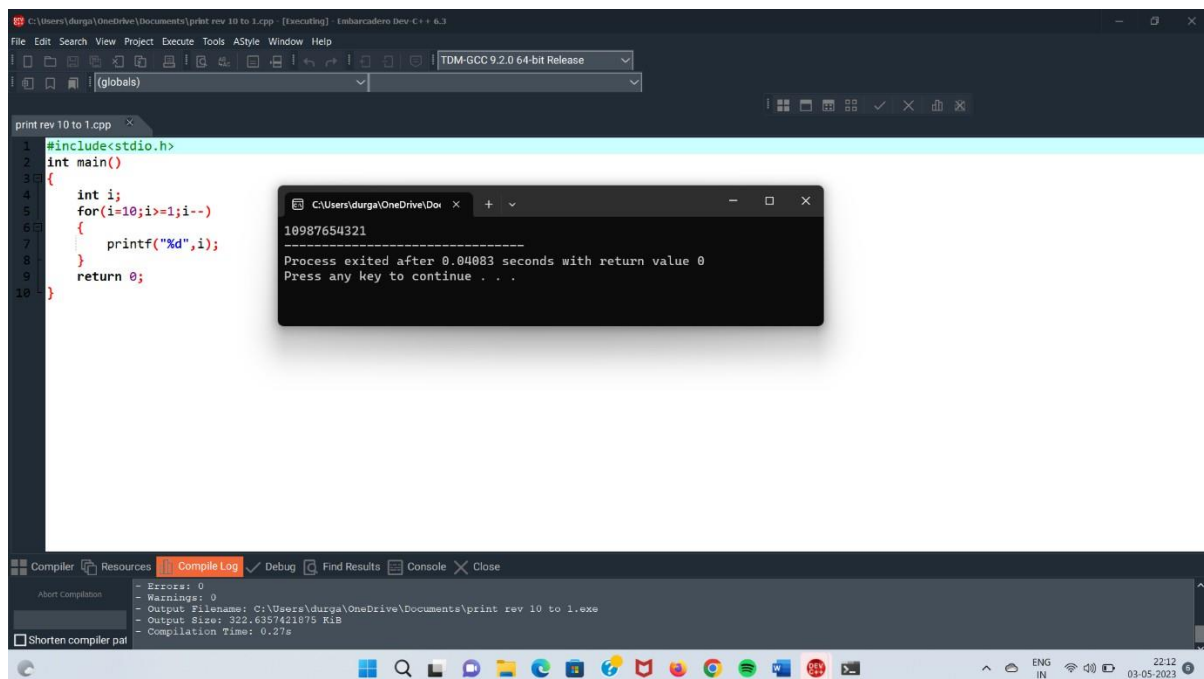


The screenshot shows a C++ IDE with a file named 'welcome 100 times.c'. The code is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int i,n;
5     n=100;
6     for(i=0;i<n;i++)
7     {
8         printf("welcome");
9     }
10 }
```

A terminal window is open, displaying the output of the program: 'welcome' printed 100 times, one on each line.

### 14)c program to print reverse 10 to 1



The screenshot shows a C++ IDE with a file named 'print rev 10 to 1.cpp'. The code is as follows:

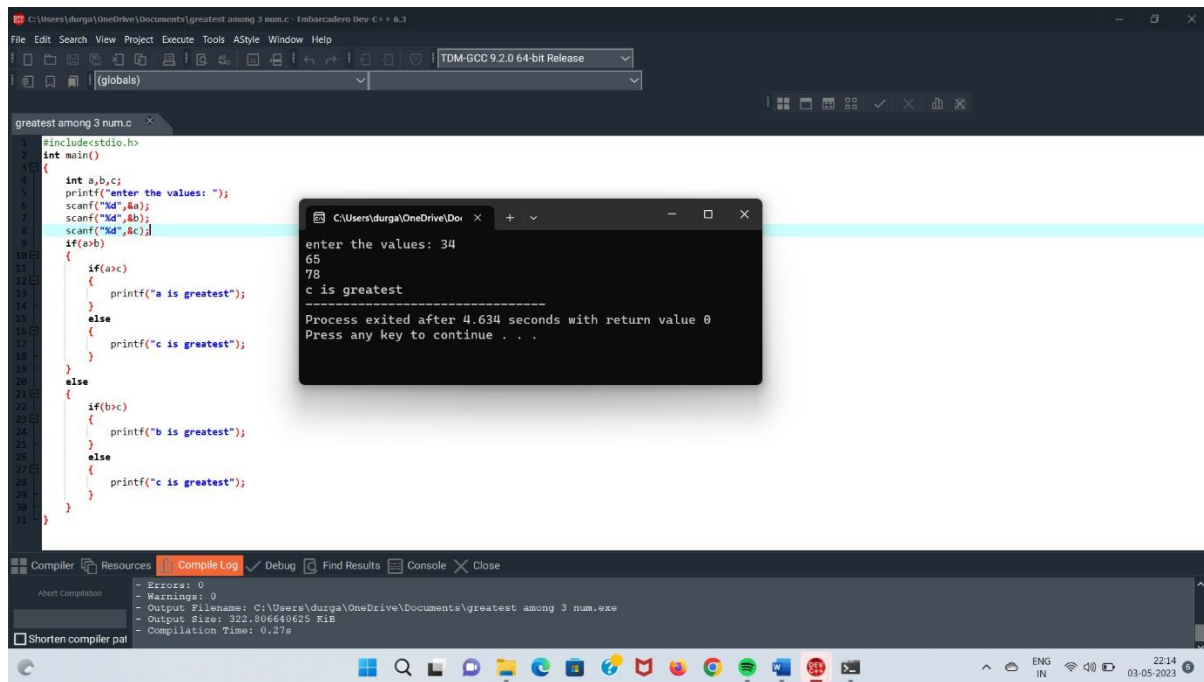
```
1 #include<stdio.h>
2 int main()
3 {
4     int i;
5     for(i=10;i>=1;i--)
6     {
7         printf("%d",i);
8     }
9     return 0;
10 }
```

A terminal window is open, displaying the output of the program: '10987654321'. Below the output, it says 'Process exited after 0.04083 seconds with return value 0' and 'Press any key to continue . . .'. At the bottom of the IDE, the 'Compiler' tab is active, showing the following compilation details:

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\durga\OneDrive\Documents\print rev 10 to 1.exe
- Output Size: 322,635,742,107% x1B
- Compilation Time: 0.27s



## 15) c program to find greatest among 3 numbers

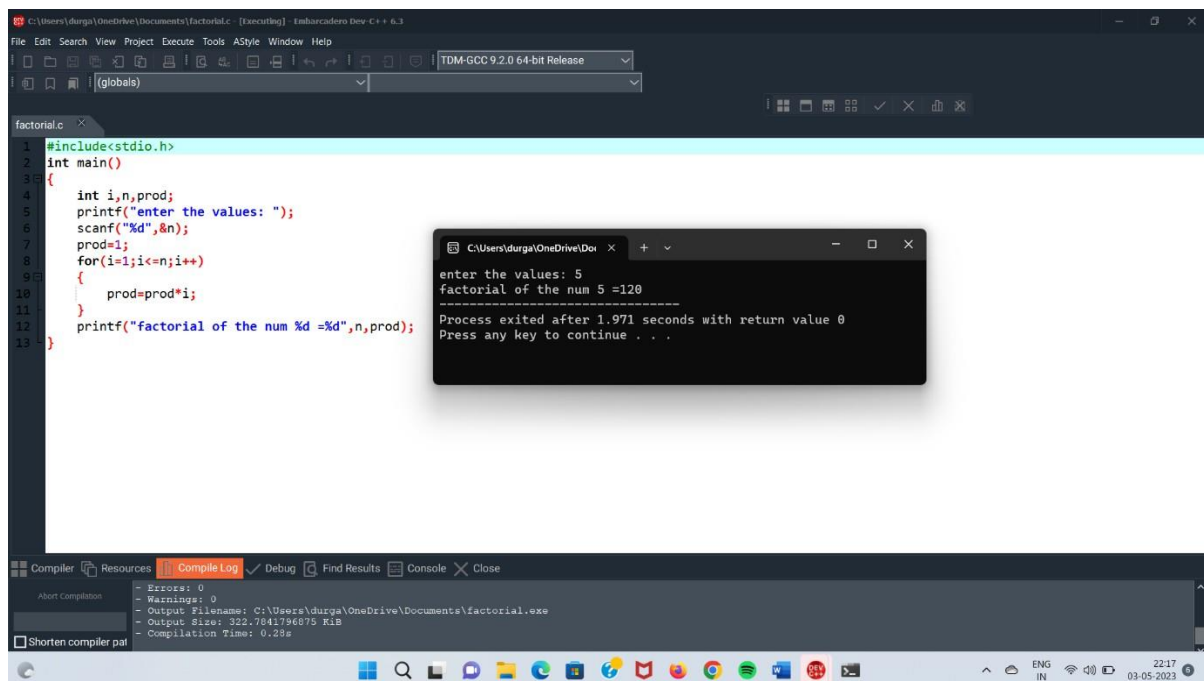


```
#include<stdio.h>
int main()
{
    int a,b,c;
    printf("enter the values: ");
    scanf("%d",&a);
    scanf("%d",&b);
    scanf("%d",&c);
    if(a>b)
    {
        if(a>c)
        {
            printf("a is greatest");
        }
        else
        {
            printf("c is greatest");
        }
    }
    else
    {
        if(b>c)
        {
            printf("b is greatest");
        }
        else
        {
            printf("c is greatest");
        }
    }
}
```

enter the values: 34  
65  
78  
c is greatest  
-----  
Process exited after 4.634 seconds with return value 0  
Press any key to continue . . .

Compiler: TDM-GCC 9.2.0 64-bit Release  
Errors: 0  
Warnings: 0  
Output Filename: C:\Users\durga\OneDrive\Documents\greatest among 3 num.exe  
Output Size: 322.806640625 KiB  
Compilation Time: 0.27s

## 16) c program to find factorial of given number



```
#include<stdio.h>
int main()
{
    int i,n,prod;
    printf("enter the values: ");
    scanf("%d",&n);
    prod=1;
    for(i=1;i<=n;i++)
    {
        prod=prod*i;
    }
    printf("factorial of the num %d =%d",n,prod);
}
```

enter the values: 5  
factorial of the num 5 =120  
-----  
Process exited after 1.971 seconds with return value 0  
Press any key to continue . . .

Compiler: TDM-GCC 9.2.0 64-bit Release  
Errors: 0  
Warnings: 0  
Output Filename: C:\Users\durga\OneDrive\Documents\factorial.exe  
Output Size: 322.7841796875 KiB  
Compilation Time: 0.28s



## 17) c program to find fibunnaci series

The screenshot shows a C program in a code editor and its execution output. The code is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int a,b,res,n,i;
5     printf("enter the number of terms:");
6     scanf("%d",&n);
7     a=0;
8     b=1;
9     for(i=1;i<n;i++)
10    {
11        printf("%d",a);
12        res=a+b;
13        a=b;
14        b=res;
15    }
16 }
17 }
```

The execution output is shown in a separate window:

```
enter the number of terms:10
01123581321
-----
Process exited after 4.334 seconds with return value 0
Press any key to continue . . .
```

## 18)c program to search element in array using binary search

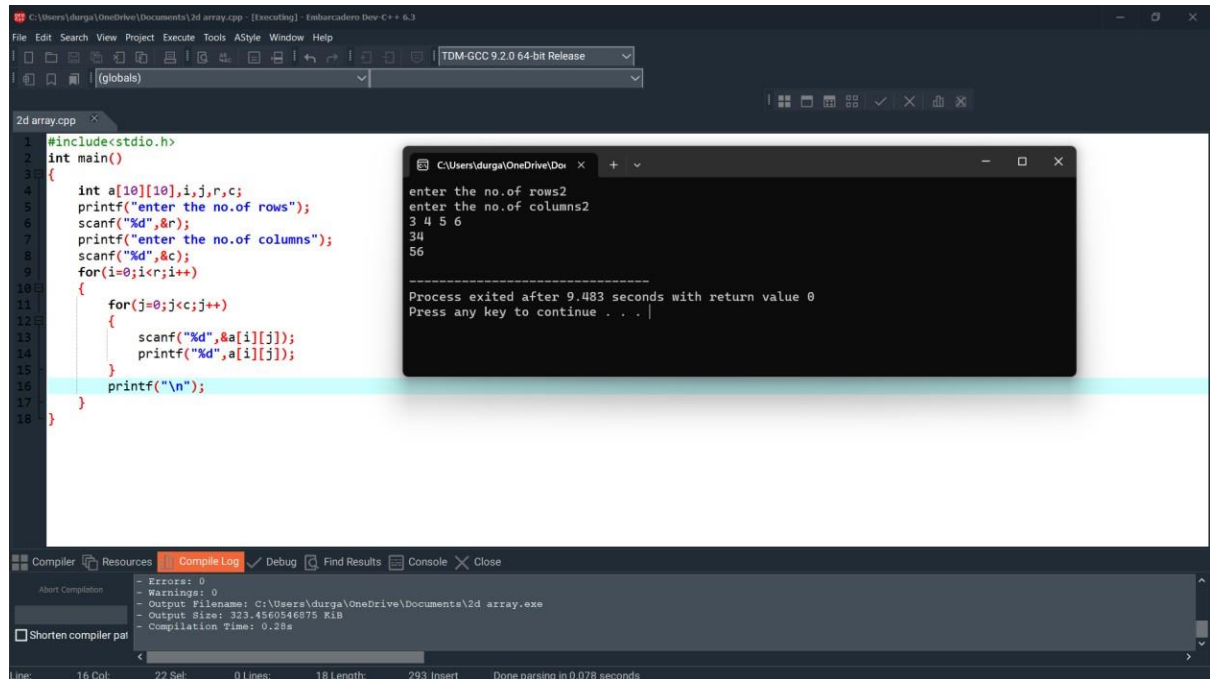
The screenshot shows a C program in a code editor and its execution output. The code is as follows:

```
1 #include<stdio.h>
2 int main()
3 {
4     int i,a[15],n,x,low,mid,high;
5     printf("Enter the no. of elements");
6     scanf("%d",&n);
7     printf("Enter the elements");
8     for(i=0;i<n;i++)
9     {
10        scanf("%d",&a[i]);
11    }
12    printf("Enter the element to be search");
13    scanf("%d",&x);
14    low=0;
15    high=n-1;
16    while(low<high)
17    {
18        mid=(low+high)/2;
19        if(x==a[mid])
20        {
21            printf("Element found ",a[mid]);
22            break;
23        }
24        else if(x<a[mid])
25        {
26            high=mid-1;
27        }
28        else
29        {
30            low=mid+1;
31        }
32    }
33 }
34 }
```

The execution output is shown in a separate window:

```
Enter the no. of elements3
Enter the elements1 2 3
Enter the element to be search2
Element found
-----
Process exited after 15.7 seconds with return value 0
Press any key to continue . . .
```

## 19) initialization and printing of 2D array

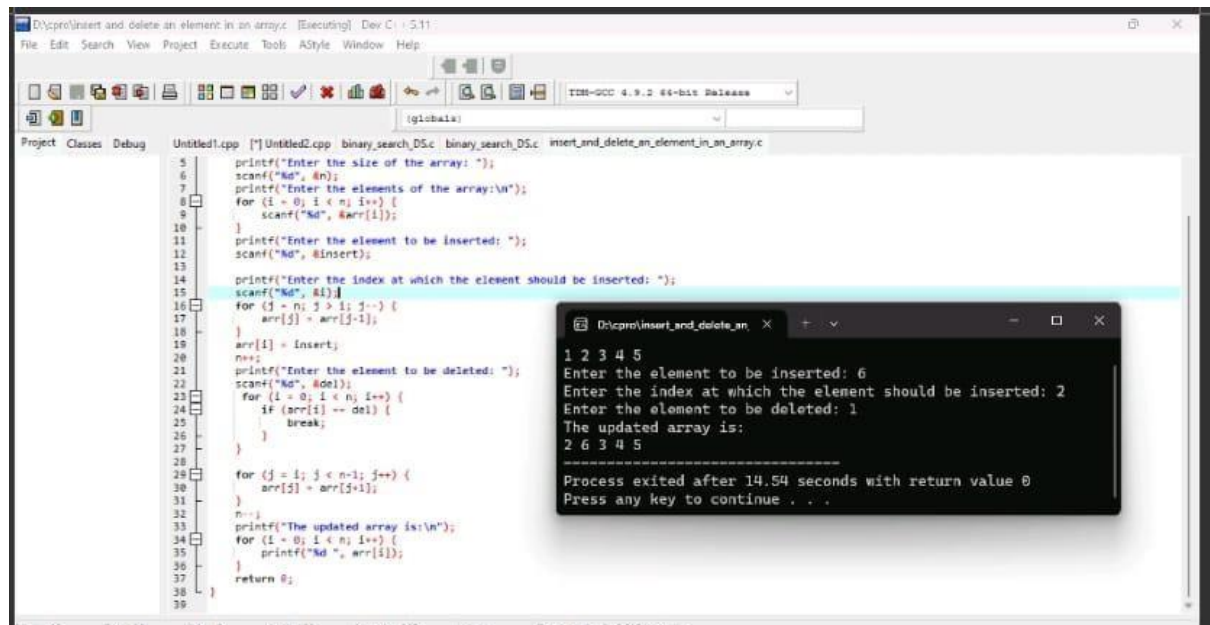


```
#include<stdio.h>
int main()
{
    int a[10][10],i,j,r,c;
    printf("enter the no.of rows");
    scanf("%d",&r);
    printf("enter the no.of columns");
    scanf("%d",&c);
    for(i=0;i<r;i++)
    {
        for(j=0;j<c;j++)
        {
            scanf("%d",&a[i][j]);
            printf("%d",a[i][j]);
        }
        printf("\n");
    }
}
```

enter the no. of rows2  
enter the no. of columns2  
3 4 5 6  
34  
56

Process exited after 9.483 seconds with return value 0  
Press any key to continue . . .

## 20) insert and delete elements in array



```
5 printf("Enter the size of the array: ");
6 scanf("%d", &n);
7 printf("Enter the elements of the array:\n");
8 for (i = 0; i < n; i++) {
9     scanf("%d", &arr[i]);
10 }
11 printf("Enter the element to be inserted: ");
12 scanf("%d", &insert);
13
14 printf("Enter the index at which the element should be inserted: ");
15 scanf("%d", &i);
16 for (j = n; j > i; j--) {
17     arr[j] = arr[j-1];
18 }
19 arr[i] = insert;
20 n++;
21 printf("Enter the element to be deleted: ");
22 scanf("%d", &del);
23 for (i = 0; i < n; i++) {
24     if (arr[i] == del) {
25         break;
26     }
27 }
28 for (j = i; j < n-1; j++) {
29     arr[j] = arr[j+1];
30 }
31 n--;
32 printf("The updated array is:\n");
33 for (i = 0; i < n; i++) {
34     printf("%d ", arr[i]);
35 }
36 return 0;
37
38
39
```

1 2 3 4 5  
Enter the element to be inserted: 6  
Enter the index at which the element should be inserted: 2  
Enter the element to be deleted: 1  
The updated array is:  
2 6 3 4 5

Process exited after 14.54 seconds with return value 0  
Press any key to continue . . .