

ASSIGNMENT-4

1. Write a program to reverse a word using loop?

Sample Input:

String: TEMPLE

Sample Output:

Reverse String: ELPMET

Test cases:

1. SIGN UP
2. AT-LEAST
3. 1245
4. !@#\$\$%
5. 145*999=144855

Souce sode:

```
#include<iostream>

#include<algorithm>

using namespace std;

int main()

{

    string word;

    cout<<"enter the string:";

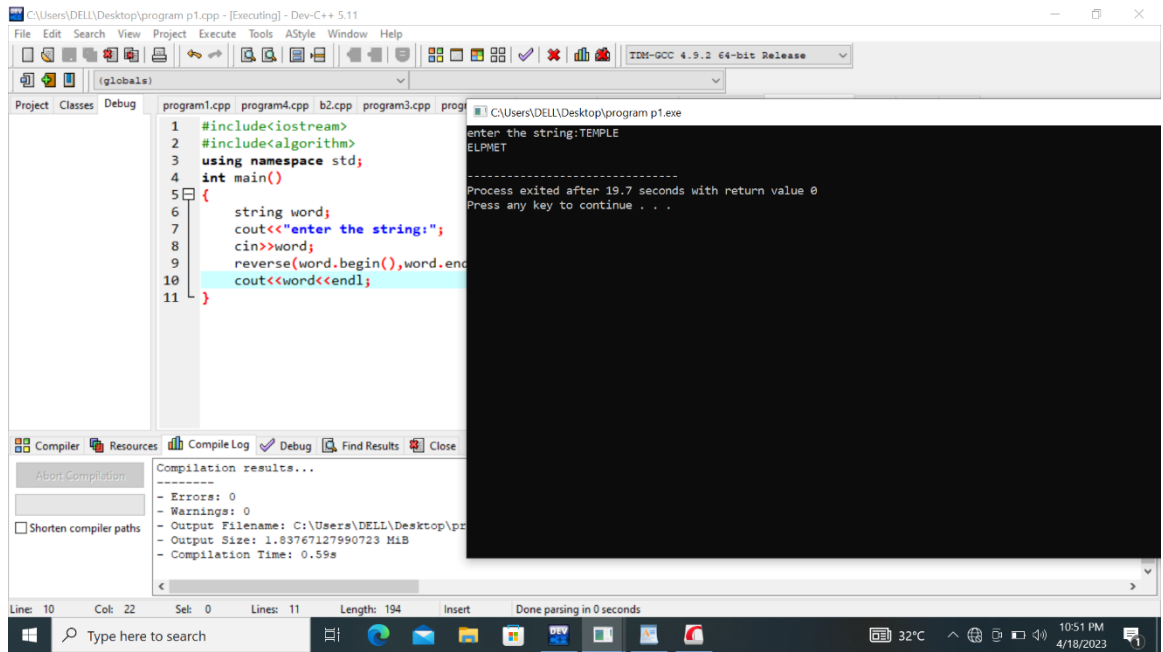
    cin>>word;

    reverse(word.begin(),word.end());

    cout<<word<<endl;

}
```

Output:



2. Write a program to print square star and rectangle dollar pattern?

Source code:

```
#include<iostream>
```

```
#include<conio.h>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int r,c,i,j,b;
```

```
    cout<<"enter the no of rows:";
```

```
    cin>>r;
```

```
    cout<<"enter the no.of columns:";
```

```
    cin>>c;
```

```
    for(i=0;i<r;i++)
```

```
    {
```

```

        for(j=0;j<c;j++){
            cout<<"*";

        }

        cout<<"\n";

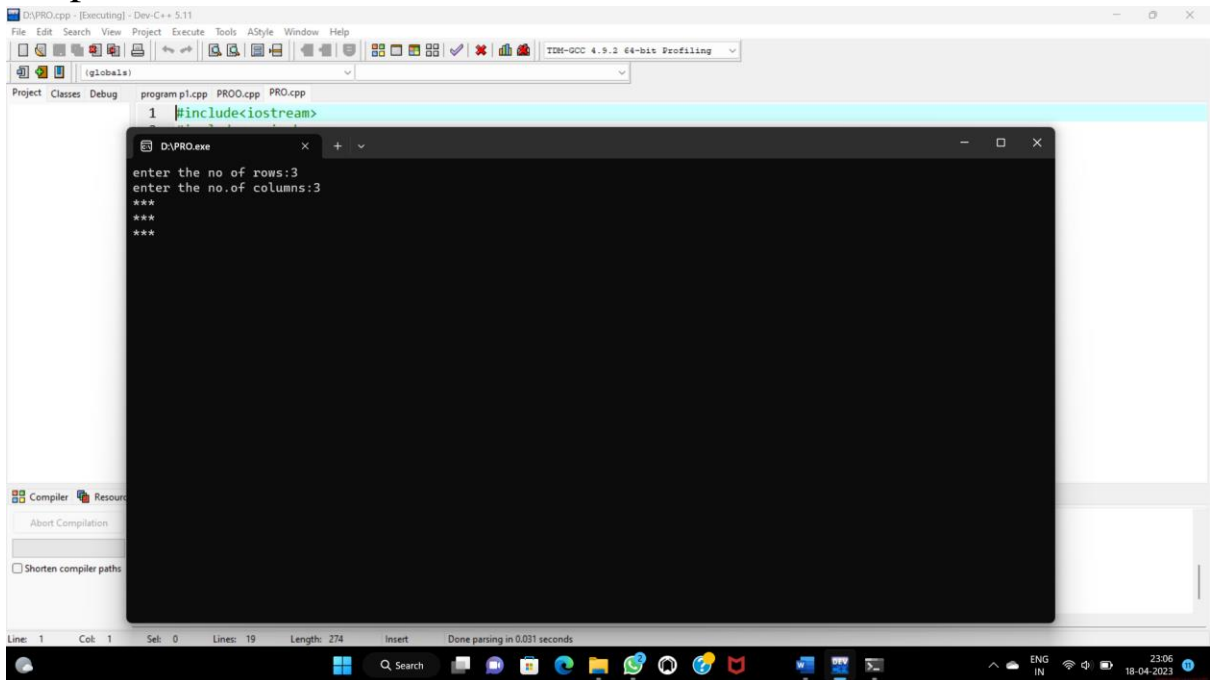
    }

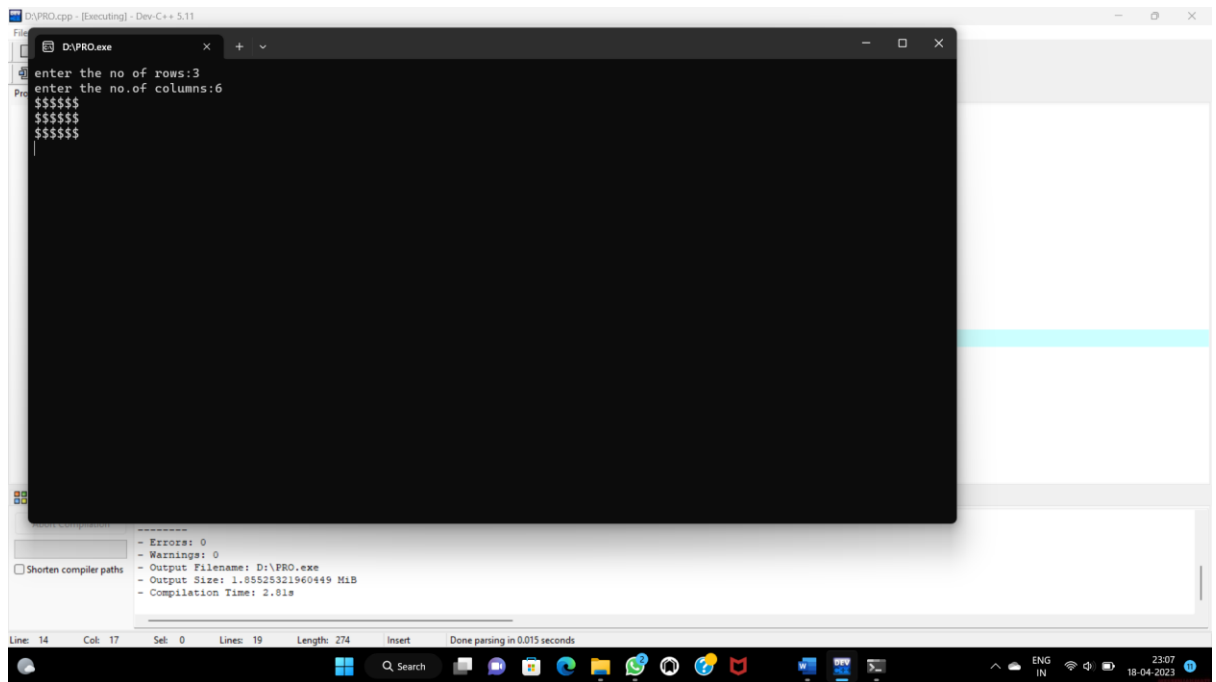
    getch();

}

```

Output:





3. Write a program to count all the prime and composite numbers entered by the user.

Sample Input:

Enter the numbers

4
54
29
71
7
59
98
23

Sample Output:

Composite number:3

Prime number:5

Test cases:

1. 33, 41, 52, 61,73,90
2. TEN, FIFTY, SIXTY-ONE, SEVENTY-SEVEN, NINE
3. 45, 87, 09, 5.0 ,2.3, 0.4

4. -54, -76, -97, -23, -33, -98
5. 45, 73, 00, 50, 67, 44

Source code:

```
#include<iostream>

#include<cmath>

using namespace std;

bool isprime(int num){
    if(num<=1){
        return false;
    }
    int sqrtnum=sqrt(num);
    for(int i=2;i<=sqrtnum;i++){
        if(num%i==0){
            return false;
        }
    }
    return true;
}

int main(){
    int num,primecount=0,compositecount=0,count=0;
    const int maxcount=10;
    while(count<maxcount){
        cout<<"enter a number";
        cin>>num;
        if(isprime(num)){
            primecount++;
        }
        else{
            compositecount++;
        }
        count++;
    }
```

```

    }

    cout<<"number of prime number entered:"<<primecount<<endl;

    cout<<"number of composite number u entered:"<<compositecount<<endl;

    return 0;

}

```

Output:

4 Write a program to check the entered user name is valid or not. Get both the inputs from the user.

Sample Input:

Enter the user name: Saveetha@789

Reenter the user name: Saveetha@123

Sample Output:

User name is Invalid

Source code:

```

#include<iostream>

using namespace std;

int main()

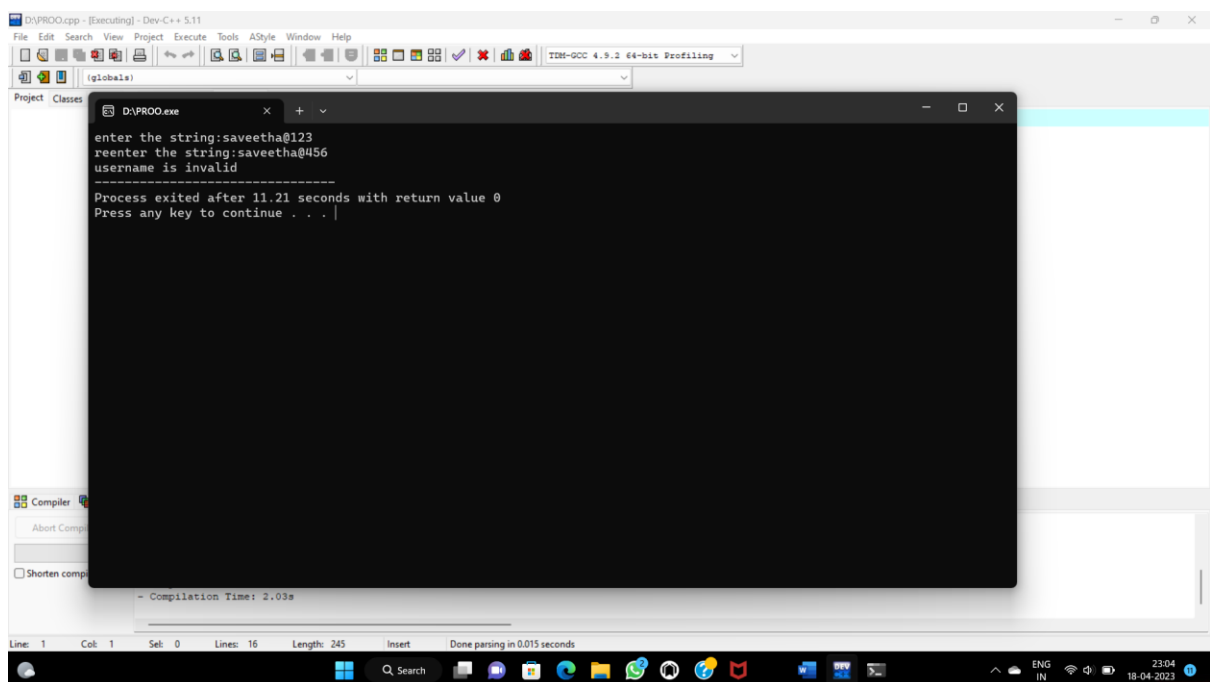
```

```

{
    string a,b;
    cout<<"enter the string:";
    cin>>a;
    cout<<"reenter the string:";
    cin>>b;
    if(a==b){
        cout<<"user name is valid";
    }
    else{
        cout<<"username is invalid";
    }
}

```

Output:



The screenshot shows the Dev-C++ IDE with a project named 'D:\PROO.cpp'. The code is compiled and executed. The output window displays the following text:

```

enter the string:saveetha@123
reenter the string:saveetha@456
username is invalid
-----
Process exited after 11.21 seconds with return value 0
Press any key to continue . . .

```

The IDE interface includes a menu bar (File, Edit, Search, View, Project, Execute, Tools, AStyle, Window, Help), a toolbar, and a status bar at the bottom showing 'Line: 1', 'Col: 1', 'Sel: 0', 'Lines: 16', 'Length: 245', and 'Done parsing in 0.015 seconds'.

