

DAY 4 Assignment QUESTIONS.

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

The screenshot shows a C++ IDE with a file named ASS4 1.cpp. The code is as follows:

```
1 #include<iostream>
2 #include<string>
3 using namespace std;
4 int main()
5 {
6     string str=" ";
7     cout<<"enter the string : ";
8     cin>>str;
9     int i;
10    cout<<"the reverse string is : ";
11    for(i=str.length()-1;i>=0;i--)
12    {
13        cout<<str[i];
14    }
15 }
```

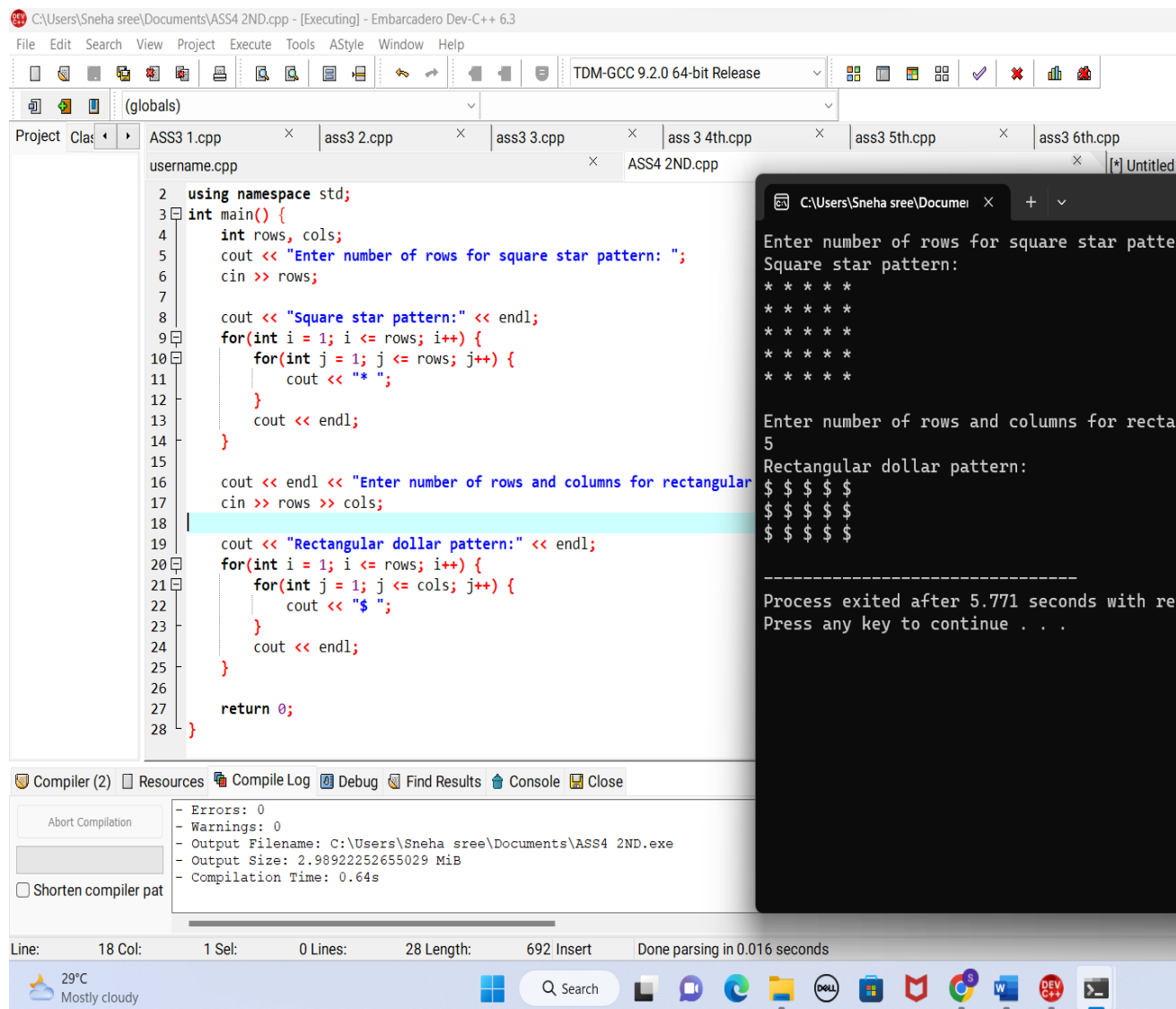
The output window shows the following text:

```
enter the string : AT-LEAST
the reverse string is : TSAEL-TA
-----
Process exited after 6.192 seconds with return value 0
Press any key to continue . . .
```

The compiler window shows the following output:

```
Compiler (2) Resources Compile Log Debug Find Results Console Close
Abort Compilation
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Sneha sree\Documents\ASS4 1.exe
- Output Size: 2.9963436126709 MiB
- Compilation Time: 0.61s
Shorten compiler pat
```

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



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

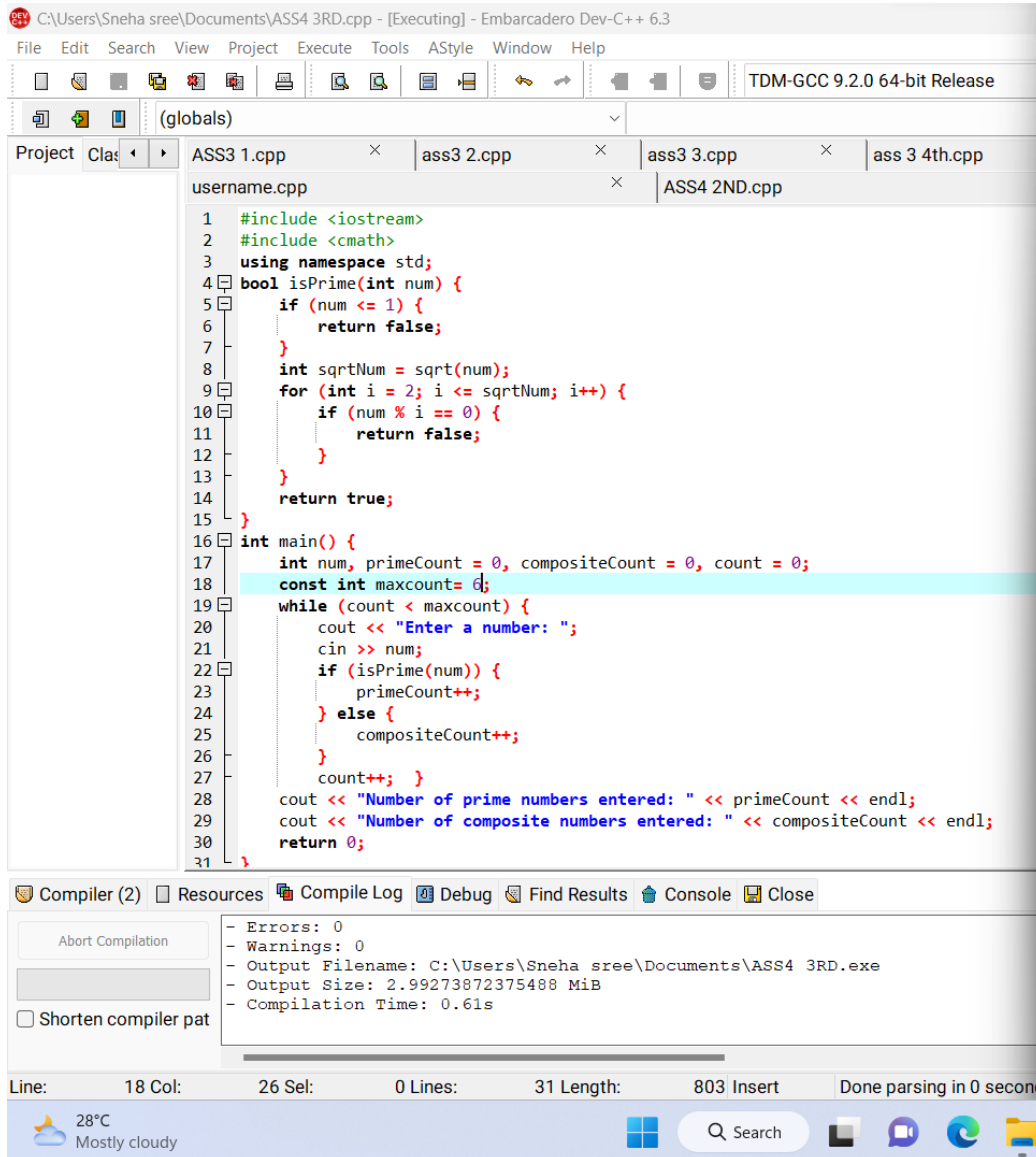
Sample Output:

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



The screenshot shows a C++ program in an IDE. The program defines a function `isPrime` that checks if a number is prime. In the `main` function, it prompts the user to enter numbers and counts the number of prime and composite numbers entered. The program is compiled and executed, showing the output in the console.

```
1 #include <iostream>
2 #include <cmath>
3 using namespace std;
4 bool isPrime(int num) {
5     if (num <= 1) {
6         return false;
7     }
8     int sqrtNum = sqrt(num);
9     for (int i = 2; i <= sqrtNum; i++) {
10        if (num % i == 0) {
11            return false;
12        }
13    }
14    return true;
15 }
16 int main() {
17     int num, primeCount = 0, compositeCount = 0, count = 0;
18     const int maxcount= 6;
19     while (count < maxcount) {
20         cout << "Enter a number: ";
21         cin >> num;
22         if (isPrime(num)) {
23             primeCount++;
24         } else {
25             compositeCount++;
26         }
27         count++; }
28     cout << "Number of prime numbers entered: " << primeCount << endl;
29     cout << "Number of composite numbers entered: " << compositeCount << endl;
30     return 0;
31 }
```

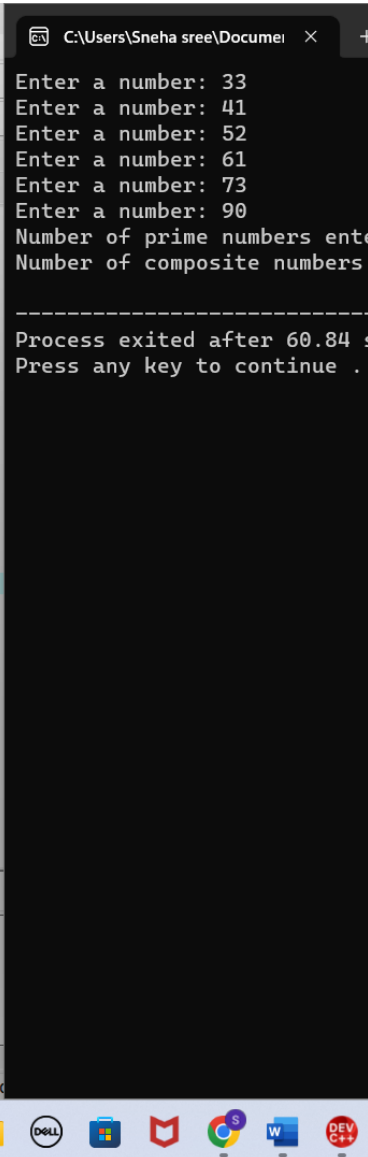
Compiler (2) Resources Compile Log Debug Find Results Console Close

Abort Compilation

Shorten compiler pat

Errors: 0
Warnings: 0
Output Filename: C:\Users\Sneha sree\Documents\ASS4 3RD.exe
Output Size: 2.99273872375488 MiB
Compilation Time: 0.61s

Line: 18 Col: 26 Sel: 0 Lines: 31 Length: 803 Insert Done parsing in 0 seconds



The screenshot shows the output of the program in the console. It displays the prompts and user inputs for the first five test cases, followed by the final counts of prime and composite numbers.

```
Enter a number: 33
Enter a number: 41
Enter a number: 52
Enter a number: 61
Enter a number: 73
Enter a number: 90
Number of prime numbers entered: 5
Number of composite numbers entered: 5
-----
Process exited after 60.84 s
Press any key to continue .
```

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

C:\Users\Sneha sree\Documents\username.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 Class ASS3 1.cpp x ass3 2.cpp x ass3 3.cpp x ass 3 4th.cpp x ass3 5th.cpp x ass3 6th.cpp x ass3 7th.cpp x ASS4 1.cpp x usernar

```
1 #include<iostream>
2 #include<algorithm>
3 using namespace std;
4 int main()
5 {
6     string a,b;
7
8
9
10    a="saveetha@789 ";
11    b= " saveetha@123";
12
13    if(a==b)
14    {
15        cout<<"entered user name is valid"<<endl;
16
17    }
18    else
19    {
20        cout<<"entered user name is invalid"<<endl;
21    }
22
23
24 }
```

Compiler (2) Resources Compile Log Debug Find Results Console Close

Abort Compilation

Errors: 0
Warnings: 0
Output Filename: C:\Users\Sneha sree\Documents\username.exe
Output Size: 2.9901647567749 MiB
Compilation Time: 0.64s

Shorten compiler path

Line: 10 Col: 20 Sel: 0 Lines: 24 Length: 286 Insert Done parsing in 0 seconds

29°C Mostly cloudy

Search

DEV C++

C:\Users\Sneha sree\Documents\username.exe

entered user name is invalid

Process exited after 0.0175 seconds with return code 0
Press any key to continue . . .