

2CS701 Compiler Construction

Practical 2	
Rollno: 19BCE236	Name: Samariya Darsh
Date: 11-10-2022	Batch: D1

Aim :- To implement recursive descent parser.

Grammar :-

$S \rightarrow E+i$

$E \rightarrow i * E$

Code :-

```
#include <stdio.h>
char ch;
int fail = 0;
void next(char n)
{
    if (ch == n)
    {
        ch = getchar();
    }
    else
    {
        printf("Error");
        fail = 1;
    }
}

void next2()
{
    if (ch == 'i')
    {
        next('i');
        next('*');
    }
}
```

```

        next2();
    }
    else if (ch == 't')
    {
        next('t');

    }

}

void start()
{
    next2();
    if (ch == '+')
    {
        next('+');
        next('i');
    }
    else
    {
        fail = 1;
        printf("Error");

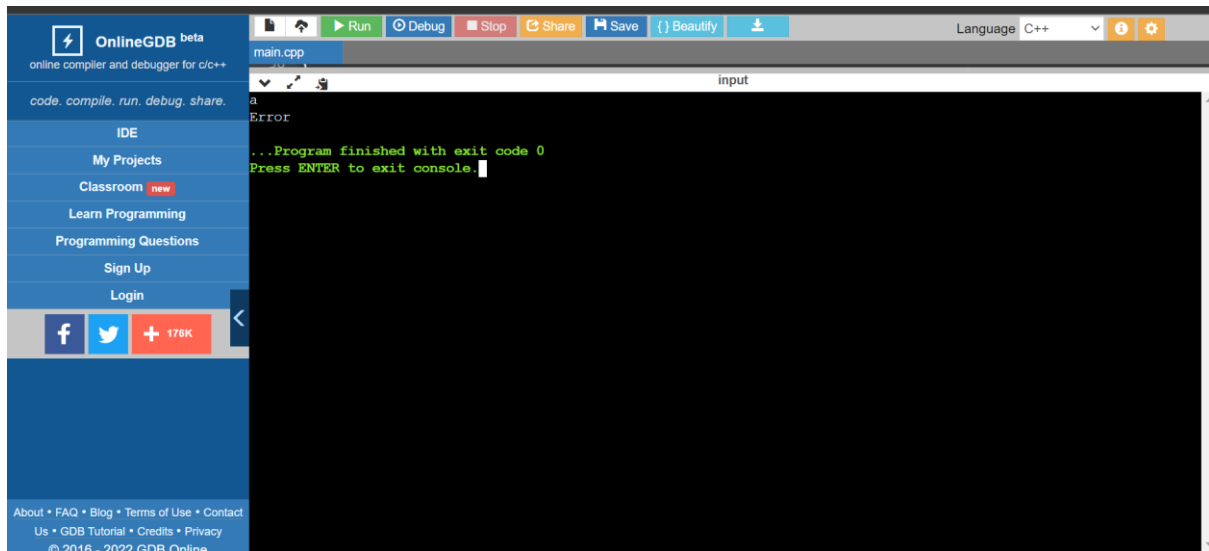
    }
}

int main()
{
    ch = getchar();
    start();
    if (!fail)
        printf("Success");

}

```

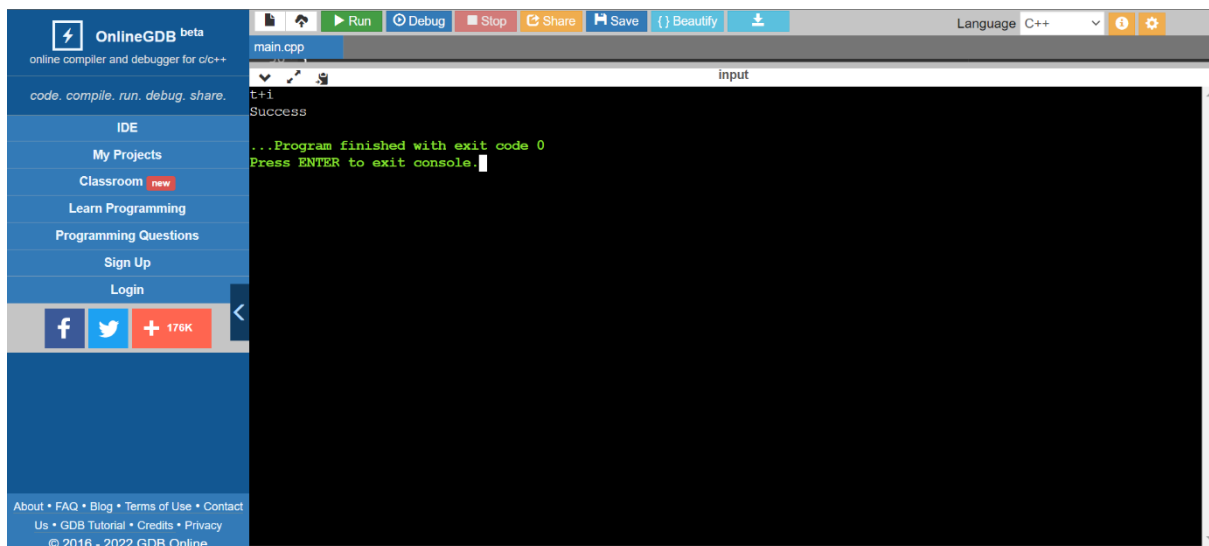
Output :-



The screenshot shows the OnlineGDB beta IDE interface. The left sidebar contains navigation links: IDE, My Projects, Classroom (new), Learn Programming, Programming Questions, Sign Up, and Login. Below these are social media icons for Facebook, Twitter, and a '+ 176K' button. The main editor area displays a C++ program named 'main.cpp' with the following code:

```
#include <iostream>
using namespace std;
int main()
{
    cout << "Hello World!";
    return 0;
}
```

The output console shows the message: "...Program finished with exit code 0" and "Press ENTER to exit console." The top toolbar includes buttons for Run, Debug, Stop, Share, Save, and Beautify. The language is set to C++.



This screenshot is identical to the one above, showing the OnlineGDB beta IDE interface with the same C++ program and output. The output console displays: "...Program finished with exit code 0" and "Press ENTER to exit console." The top toolbar includes buttons for Run, Debug, Stop, Share, Save, and Beautify. The language is set to C++.