

Q1. Write a C++ Program to write data into the file?

Ifstream : input (read)

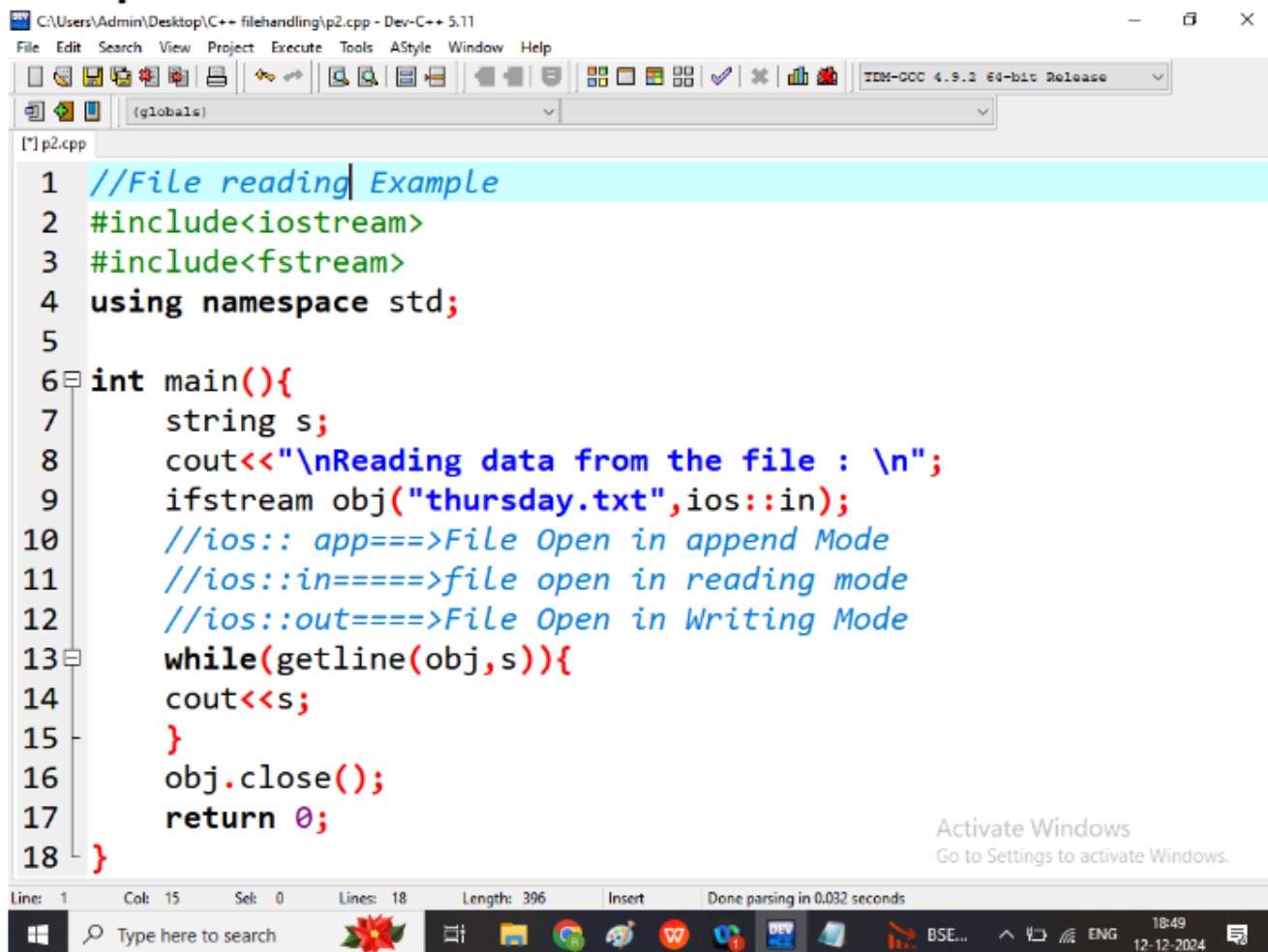
Ofstream : output(write)

fstream: input & output

Step1: Create file class Object

Step2: Write data into file

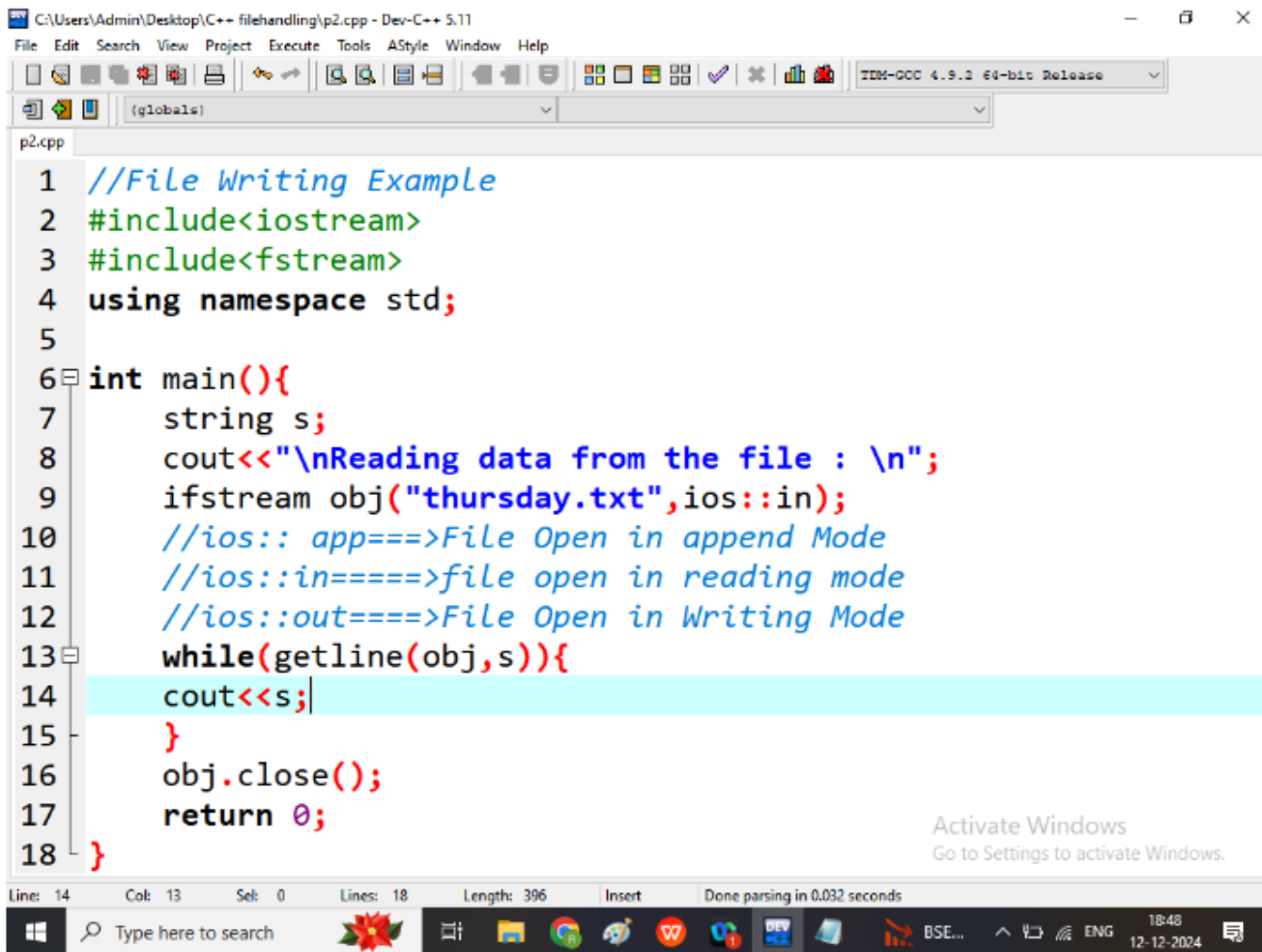
Step3: close the file



The screenshot shows a C++ program in the Dev-C++ IDE. The program is titled 'p2.cpp' and is located at 'C:\Users\Admin\Desktop\C++ filehandling\p2.cpp - Dev-C++ 5.11'. The code is as follows:

```
1 //File reading Example
2 #include<iostream>
3 #include<fstream>
4 using namespace std;
5
6 int main(){
7     string s;
8     cout<<"\nReading data from the file : \n";
9     ifstream obj("thursday.txt",ios::in);
10    //ios::app==>File Open in append Mode
11    //ios::in==>file open in reading mode
12    //ios::out==>File Open in Writing Mode
13    while(getline(obj,s)){
14        cout<<s;
15    }
16    obj.close();
17    return 0;
18 }
```

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: 15', 'Sel: 0', 'Lines: 18', 'Length: 396', 'Insert', and 'Done parsing in 0.032 seconds'. The Windows taskbar is visible at the very bottom with the search bar and system clock showing 18:49 on 12-12-2024.

A screenshot of a C++ IDE window titled "C:\Users\Admin\Desktop\C++ filehandling\p2.cpp - Dev-C++ 5.11". The window shows a C++ program for file reading. The code includes `<iostream>` and `<fstream>`, uses the `std` namespace, and defines a `main` function. It opens a file named "thursday.txt" in reading mode using `ifstream` and `ios::in`. A `while` loop uses `getline` to read lines from the file and prints them with `cout`. The status bar at the bottom shows "Line: 14", "Col: 13", "Sel: 0", "Lines: 18", "Length: 396", "Insert", and "Done parsing in 0.032 seconds". The Windows taskbar is visible at the bottom with the date "12-12-2024" and time "18:48".

```
1 //File Writing Example
2 #include<iostream>
3 #include<fstream>
4 using namespace std;
5
6 int main(){
7     string s;
8     cout<<"\nReading data from the file : \n";
9     ifstream obj("thursday.txt",ios::in);
10    //ios::app==>File Open in append Mode
11    //ios::in==>file open in reading mode
12    //ios::out==>File Open in Writing Mode
13    while(getline(obj,s)){
14        cout<<s;
15    }
16    obj.close();
17    return 0;
18 }
```

Q2. Write a C++ Program to write and read object from the file?

```
class Student{
string name;
string enroll;
int rollno;
float per;
```

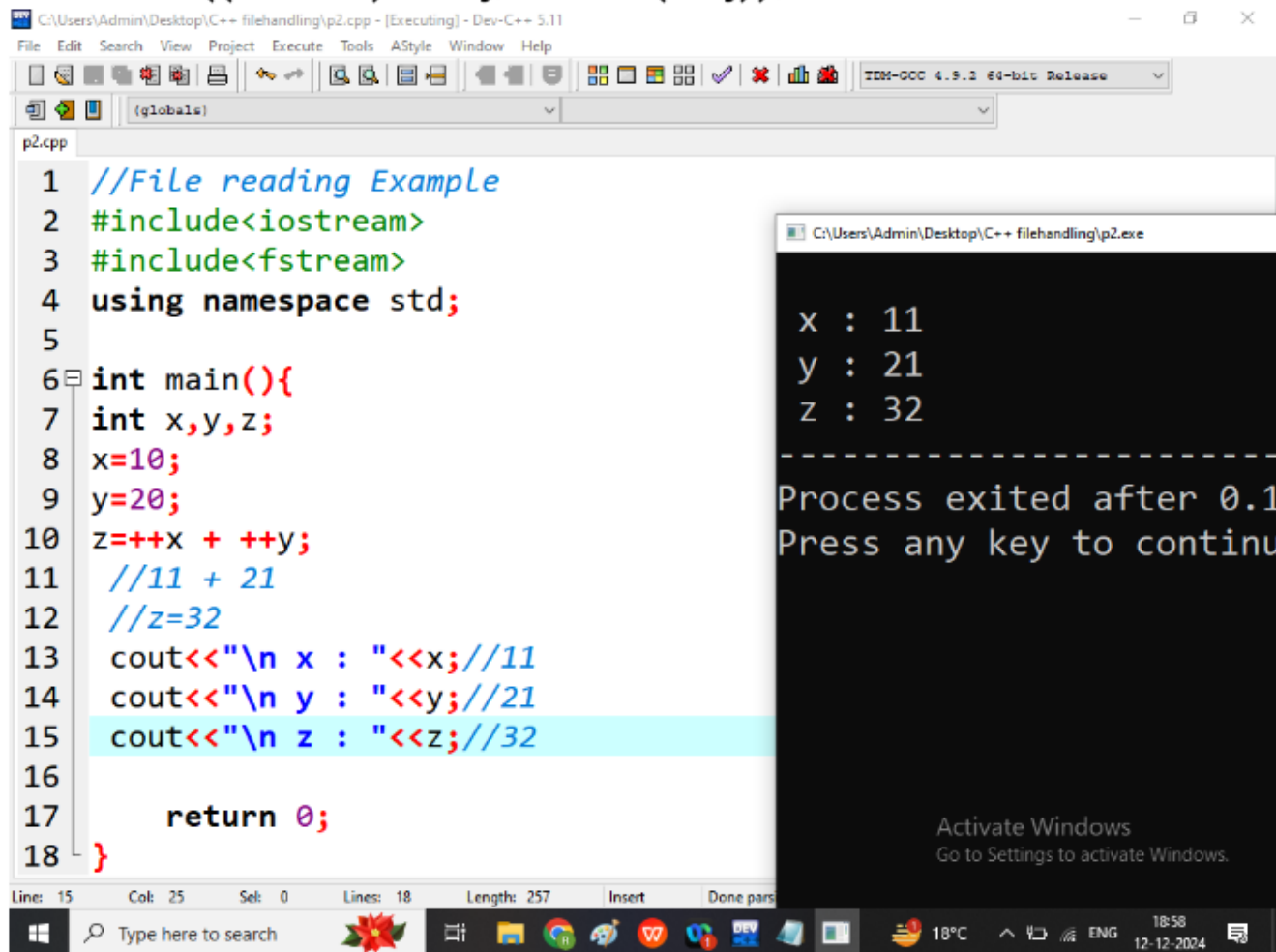
};

//To write object into the file

file.write((char \*)&obj,sizeof(obj));

//To Read Object from the file

file.read((char \*)&obj,sizeof(obj));



The screenshot shows a C++ IDE with a file named `p2.cpp` open. The code is a simple program that calculates the sum of two numbers, `x` and `y`, and stores the result in `z`. The code is as follows:

```
1 //File reading Example
2 #include<iostream>
3 #include<fstream>
4 using namespace std;
5
6 int main(){
7     int x,y,z;
8     x=10;
9     y=20;
10    z=++x + ++y;
11    //11 + 21
12    //z=32
13    cout<<"\n x : "<<x;//11
14    cout<<"\n y : "<<y;//21
15    cout<<"\n z : "<<z;//32
16
17    return 0;
18 }
```

The IDE's output window shows the execution results:

```
x : 11
y : 21
z : 32
-----
Process exited after 0.1
Press any key to continue
```

The IDE's status bar at the bottom shows the current line is 15, column is 25, and the selection is 0. The window title is `C:\Users\Admin\Desktop\C++ filehandling\p2.exe`.