

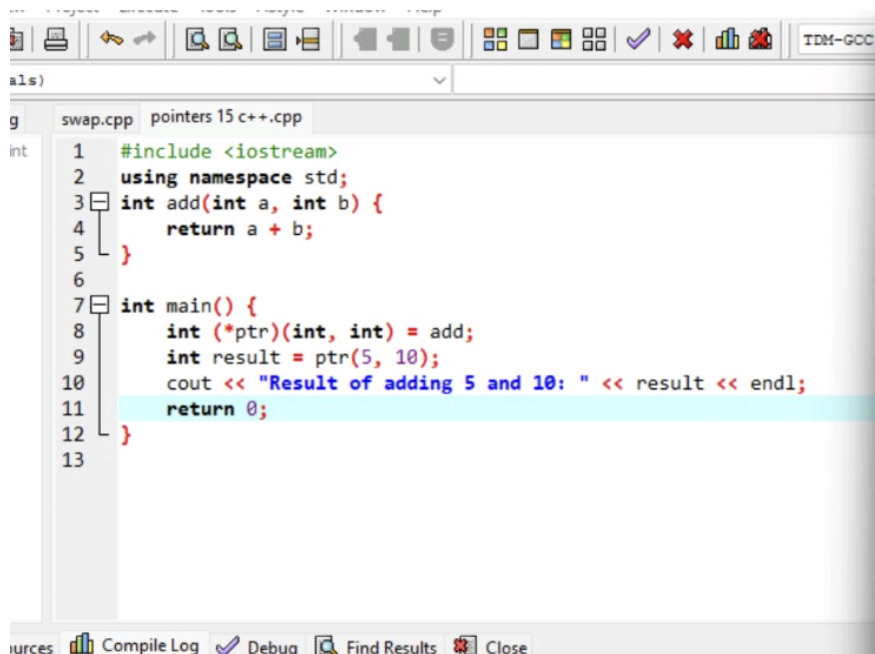
```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     int arr[5] = {1, 2, 3, 4, 5};
6     int *ptr = arr;
7     cout << "Values of the array using pointer:" << endl;
8     for (int i = 0; i < 5; i++) {
9         cout << "arr[" << i << "] = " << *(ptr + i) << endl;
10    }
11
12    return 0;
13 }
14
```

Values of the array using pointer:
arr[0] = 1
arr[1] = 2
arr[2] = 3
arr[3] = 4
arr[4] = 5

Process exited after 0.6172 seconds with return value 0
Press any key to continue . . .

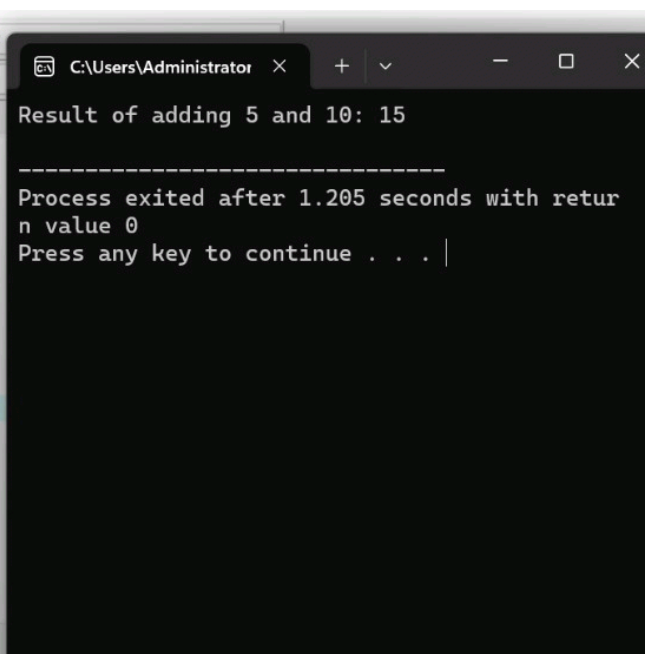
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Administrator\Documents\pointers 11 c++.exe
- Output Size: 1.83262825012207 MiB
- Compilation Time: 1.63s



The image shows a C++ IDE with a file named 'swap.cpp' open. The code defines an 'add' function and a 'main' function that uses a pointer to call it. The output of the program is displayed in a separate window.

```
1 #include <iostream>
2 using namespace std;
3 int add(int a, int b) {
4     return a + b;
5 }
6
7 int main() {
8     int (*ptr)(int, int) = add;
9     int result = ptr(5, 10);
10    cout << "Result of adding 5 and 10: " << result << endl;
11    return 0;
12 }
13
```



The image shows a command prompt window with the following output:

```
C:\Users\Administrator >
Result of adding 5 and 10: 15
-----
Process exited after 1.205 seconds with return value 0
Press any key to continue . . .
```

```
1 #include <iostream>
2 using namespace std;
3 class Person {
4 public:
5     string name;
6     int age;
7     Person(string n, int a) : name(n), age(a) {}
8     void display() {
9         cout << "Name: " << name << endl;
10        cout << "Age: " << age << endl;
11    }
12 };
13 int main() {
14     Person person("Alice", 30);
15     Person *ptr = &person;
16     cout << "Using pointer:" << endl;
17     cout << "Name: " << ptr->name << endl;
18     cout << "Age: " << ptr->age << endl;
19     cout << "Using pointer to call method:" << endl;
20     ptr->display();
21
22     return 0;
23 }
24
```

Compilation results...

- Errors: 0

- Warnings: 0

Using pointer:
Name: Alice
Age: 30
Using pointer to call method:
Name: Alice
Age: 30

Process exited after 0.7164 seconds with return value 0
Press any key to continue . . .

```
1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     float arr[5] = {1.1, 2.2, 3.3, 4.4, 5.5};
6     float *ptr = arr;
7     cout << "Values of the array using pointer:" << endl;
8     for (int i = 0; i < 5; i++) {
9         cout << "arr[" << i << "] = " << *(ptr + i) << endl;
10    }
11
12    return 0;
13 }
14
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\Administrator\Documents\pointers 13 c++.exe
- Output Size: 1.83262825012207 MiB
- Compilation Time: 1.67s

Values of the array using pointer:
arr[0] = 1.1
arr[1] = 2.2
arr[2] = 3.3
arr[3] = 4.4
arr[4] = 5.5

Process exited after 1.099 seconds with return value
Press any key to continue . . .

```

1 #include <iostream>
2 using namespace std;
3
4 int main() {
5     char arr[6] = {'H', 'e', 'l', 'l', 'o', '\0'};
6     char *ptr = arr;
7     cout << "Values of the array using pointer:" << endl;
8     for (int i = 0; i < 6; i++) {
9         cout << "arr[" << i << "] = " << *(ptr + i) << endl;
10    }
11
12    return 0;
13 }
14

```

Compile Log
 Debug
 Find Results
 Close

Compilation results...

- Errors: 0
 - Warnings: 0

Output File Name: C:\Users\Administrator\Documents\pointers_13.cpp.exe

```

C:\Users\Administrator
+
-
x

Values of the array using pointer:
arr[0] = H
arr[1] = e
arr[2] = l
arr[3] = l
arr[4] = o
arr[5] =

-----
Process exited after 0.7246 seconds with return value 0
Press any key to continue . . .

```

C:\Users\abhigna\Documents\pointer integer.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug pointer integer.cpp

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     int* ptr;
6     ptr = new int;
7     *ptr = 42;
8     cout << "Value of the integer: " << *ptr << endl;
9     delete ptr;
10    return 0;
11 }
12
```

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

Shorten compiler paths

Compilation results...

```
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\abhigna\Documents\pointer integer.exe
- Output Size: 1.83262825012207 MiB
- Compilation Time: 4.66s
```

Line: 10 Col: 1 Sel: 0 Lines: 12 Length: 202 Insert Done parsing in 2.859 seconds

C:\Users\abhigna\Documents\pointer integer.exe

```
Value of the integer: 42
-----
Process exited after 0.2829 seconds with return value 0
Press any key to continue . . .
```

08:42 24-02-2024

C:\Users\abhigna\Documents\pointer float.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug pointer integer.cpp pointer float.cpp

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     float* ptr;
6     ptr = new float;
7     *ptr = 3.14f;
8     cout << "Value of the float: " << *ptr << endl;
9     delete ptr;
10    return 0;
11 }
12
```

C:\Users\abhigna\Documents\pointer float.exe

Value of the float: 3.14

Process exited after 0.2226 seconds with return value 0
Press any key to continue . . .

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

Shorten compiler paths

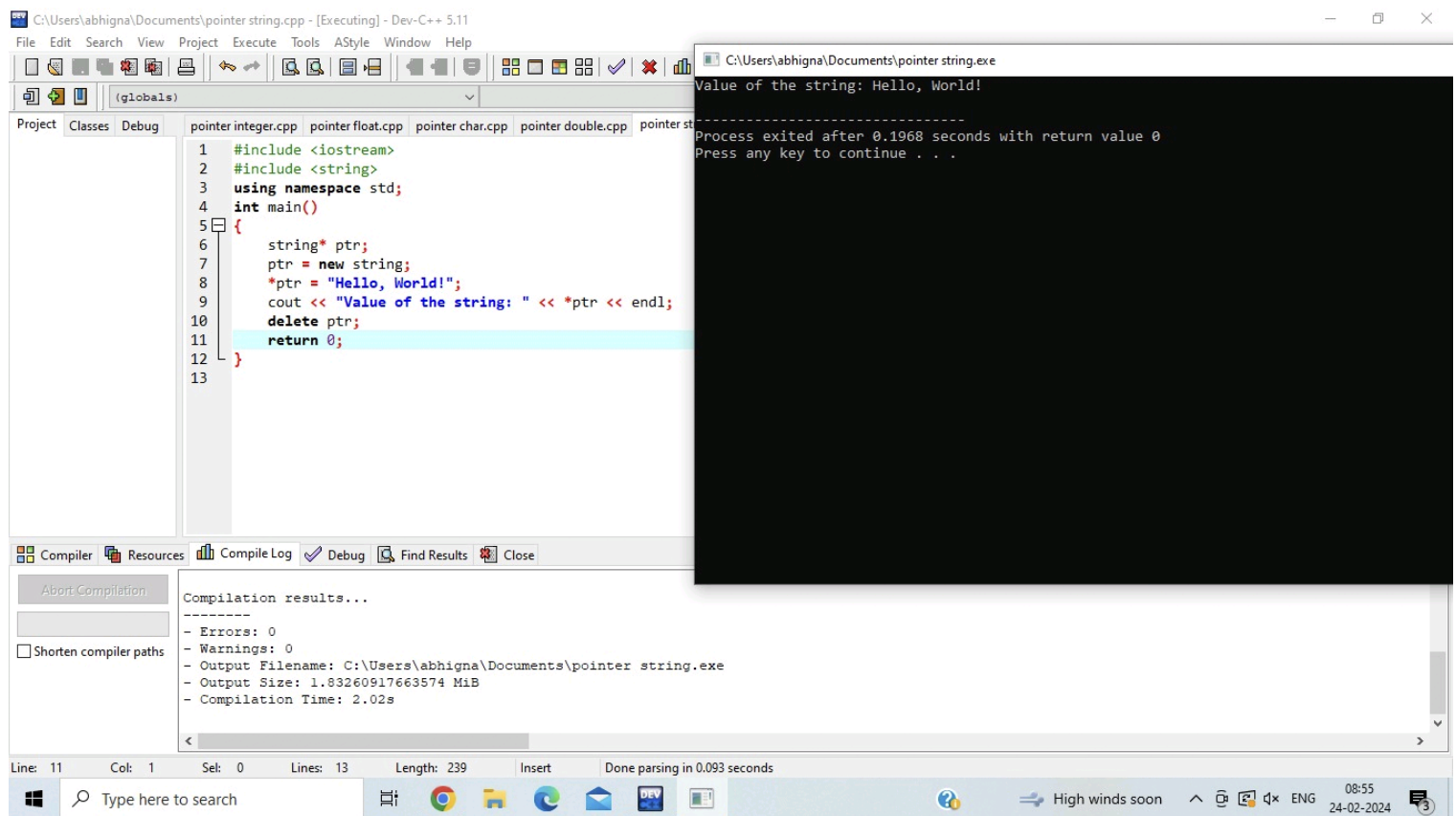
Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\abhigna\Documents\pointer float.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 2.84s

Line: 8 Col: 47 Sel: 0 Lines: 12 Length: 207 Insert Done parsing in 0.078 seconds

Type here to search

27°C Partly sunny 08:47 24-02-2024



C:\Users\abhigna\Documents\pointer double.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug pointer integer.cpp pointer float.cpp pointer char.cpp pointer double.cpp

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     double* ptr;
6     ptr = new double;
7     *ptr = 3.14159;
8     cout << "Value of the double: " << *ptr << endl;
9     delete ptr;
10    return 0;
11 }
12
```

C:\Users\abhigna\Documents\pointer double.exe

Value of the double: 3.14159

Process exited after 0.3565 seconds with return value 0

Press any key to continue . . .

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

Shorten compiler paths

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\abhigna\Documents\pointer double.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 4.13s

Line: 10 Col: 1 Sel: 0 Lines: 12 Length: 212 Insert Done parsing in 0.219 seconds

Type here to search

27°C Partly sunny 08:53 24-02-2024

C:\Users\abhigna\Documents\pointer char.cpp - [Executing] - Dev-C++ 5.11

File Edit Search View Project Execute Tools AStyle Window Help

(globals)

Project Classes Debug pointer integer.cpp pointer float.cpp pointer char.cpp

```
1 #include <iostream>
2 using namespace std;
3 int main()
4 {
5     char* ptr;
6     ptr = new char;
7     *ptr = 'A';
8     cout << "Value of the char: " << *ptr << endl;
9     delete ptr;
10    return 0;
11 }
12
```

Compiler Resources Compile Log Debug Find Results Close

Abort Compilation

Shorten compiler paths

Compilation results...

```
-----
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\abhigna\Documents\pointer char.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 3.48s
```

Line: 10 Col: 1 Sel: 0 Lines: 12 Length: 202 Insert Done parsing in 0.125 seconds

Value of the char: A

Process exited after 0.3369 seconds with return value 0

Press any key to continue . . .

27°C Partly sunny 08:50 24-02-2024