

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\rounding a float num.cpp - [Executing]...
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
rounding a float num.cpp
1 #include <iostream>
2 #include <cmath>
3
4 int main() {
5     double floatingNumber;
6
7     std::cout << "Enter a floating-point number: ";
8     std::cin >> floatingNumber;
9
10    int roundedDown = static_cast<int>(std::floor(floatingNumber));
11    int roundedUp = static_cast<int>(std::ceil(floatingNumber));
12
13    std::cout << "Original number: " << floatingNumber << std::endl;
14    std::cout << "Rounded down: " << roundedDown << std::endl;
15    std::cout << "Rounded up: " << roundedUp << std::endl;
16
17    return 0;
18 }
19
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\C++ tiru\rounding a float num.cpp.out
- Output Size: 1.835618019104 MiB
- Compilation Time: 0.49s
```

```
C:\Users\kvaru\OneDrive\Doc x + v
Enter a floating-point number: 723.928
Original number: 723.928
Rounded down: 723
Rounded up: 724

-----
Process exited after 11.41 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\print 1 to 10.cpp - [Executing] - Dev-C++
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
print 1 to 10.cpp
1 #include <iostream>
2
3 int main() {
4
5     for (int i = 1; i <= 10; ++i) {
6         std::cout << i << " ";
7     }
8
9     std::cout << std::endl;
10
11    return 0;
12 }
13
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\C++ tiru\print 1 to 10.cpp.out
- Output Size: 1.832609176635 MiB
- Compilation Time: 0.47s
```

```
C:\Users\kvaru\OneDrive\Doc x + v
1 2 3 4 5 6 7 8 9 10

-----
Process exited after 0.02682 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\prime num.cpp - [Executing] - Dev-C++...
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2
(globals)
prime num.cpp
1 #include <iostream>
2
3 int main() {
4     int number;
5     std::cout << "Enter a positive integer: ";
6     std::cin >> number;
7
8     if (number <= 0) {
9         std::cout << "Please enter a positive integer." << std::endl;
10        return 1;
11    }
12
13    bool isPrime = true;
14
15    for (int i = 2; i <= number / 2; ++i) {
16        if (number % i == 0) {
17            isPrime = false;
18            break;
19        }
20    }
21
22    if (isPrime) {
23        std::cout << number << " is a prime number." << std::endl;
24    } else {
25        std::cout << number << " is not a prime number." << std::endl;
26    }
27
28 }
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\prime num.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 0.47s
Line: 1 Col: 1 Sel: 0 Lines: 30 Length: 633 Insert
```

```
C:\Users\kvaru\OneDrive\Doc x + v
Enter a positive integer: 29
29 is a prime number.

-----
Process exited after 5.486 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\pos or neg.cpp - [Executing] - Dev-C++...
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2
(globals)
pos or neg.cpp
1 #include <iostream>
2
3 int main() {
4     int number;
5     std::cout << "Enter a number: ";
6     std::cin >> number;
7
8     if (number > 0) {
9         std::cout << "The number is positive." << std::endl;
10    } else if (number < 0) {
11        std::cout << "The number is negative." << std::endl;
12    } else {
13        std::cout << "The number is zero." << std::endl;
14    }
15
16    return 0;
17
18 }
Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\pos or neg.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 0.47s
Line: 1 Col: 1 Sel: 0 Lines: 18 Length: 399 Insert
```

```
C:\Users\kvaru\OneDrive\Doc x + v
Enter a number: 873
The number is positive.

-----
Process exited after 13.04 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++\tiru\palindrome.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
prime num.cpp palindrome.cpp
1 #include <iostream>
2 #include <string>
3 #include <cctype>
4
5 int main() {
6     std::string inputString;
7     std::cout << "Enter a string: ";
8     getline(std::cin, inputString);
9     for (std::size_t i = 0; i < inputString.length(); ++i) {
10         inputString[i] = std::tolower(inputString[i]);
11     }
12
13     std::size_t start = 0;
14     std::size_t end = inputString.length() - 1;
15     bool isPalindrome = true;
16     while (start < end) {
17         while (!std::isalnum(inputString[start]) && start < end) {
18             ++start;
19         }
20         while (!std::isalnum(inputString[end]) && start < end) {
21             --end;
22         }
23         if (inputString[start] != inputString[end]) {
24             isPalindrome = false;
25             break;
26         }
27         ++start;
28         --end;
29     }
30
31     if (isPalindrome) {
32         std::cout << "The string is a palindrome." << std::endl;
33     } else {
34         std::cout << "The string is not a palindrome." << std::endl;
35     }
36 }
```

```
C:\Users\kvaru\OneDrive\Doc x + -
Enter a string: tirupathi
The string is not a palindrome.

-----
Process exited after 8.708 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++\tiru\mul table.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
(globals)
mul table.cpp
1 #include <iostream>
2
3 int main() {
4     int number;
5     std::cout << "Enter a number to print its multiplication table: ";
6     std::cin >> number;
7
8     std::cout << "Multiplication table for " << number << ":\n";
9
10    for (int i = 1; i <= 10; ++i) {
11        std::cout << number << " * " << i << " = " << (number * i) << std::endl;
12    }
13
14    return 0;
15 }
16
```

Compilation results...

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\C++\tiru\mul table.exe
- Output Size: 1.83260917663574 MiB
- Compilation Time: 0.47s

```
C:\Users\kvaru\OneDrive\Doc x + -
Enter a number to print its multiplication table: 5
Multiplication table for 5:
5 * 1 = 5
5 * 2 = 10
5 * 3 = 15
5 * 4 = 20
5 * 5 = 25
5 * 6 = 30
5 * 7 = 35
5 * 8 = 40
5 * 9 = 45
5 * 10 = 50

-----
Process exited after 2.562 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\missing element.cpp - [Executing] - Dev...
File Edit Search View Project Execute Tools AStyle Window Help
IDM-GCC 4.9.3
(globals)
missing element.cpp
1 #include <iostream>
2
3 int findSmallestMissing(int arr[], int n) {
4     for (int i = 0; i < n; i++) {
5         if (arr[i] != i + 1) {
6             return i + 1;
7         }
8     }
9     return n + 1;
10 }
11
12 int main() {
13     int arr[] = {1, 3, 4, 5, 6};
14     int n = sizeof(arr) / sizeof(arr[0]);
15
16     int missing = findSmallestMissing(arr, n);
17
18     std::cout << "Smallest missing element: " << missing << std::endl;
19
20     return 0;
21 }
```

Compiler Resources Compile Log Debug Find Results Close

Compilation results...

-----

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\missing element.exe
- Output Size: 1.83263874053955 MiB
- Compilation Time: 0.45s

Shorten compiler paths

Line: 1 Col: 1 Sel: 0 Lines: 21 Length: 439 Insert

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\largest in 3 using ternary.cpp - [Executing] - Dev...
File Edit Search View Project Execute Tools AStyle Window Help
IDM-GCC 4.9.3
(globals)
largest in 3 using ternary.cpp
1 #include <iostream>
2
3 int main() {
4     int num1, num2, num3;
5
6     std::cout << "Enter the first number: ";
7     std::cin >> num1;
8
9     std::cout << "Enter the second number: ";
10    std::cin >> num2;
11
12    std::cout << "Enter the third number: ";
13    std::cin >> num3;
14    int largest = (num1 > num2) ? ((num1 > num3) ? num1 : num3) : ((num2 > num3) ? num2 : num3);
15
16    std::cout << "The largest number among " << num1 << ", " << num2 << ", " << num3 << " is: " << largest << std::endl;
17
18    return 0;
19 }
20
```

Compiler Resources Compile Log Debug Find Results Close

Compilation results...

-----

- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\largest in 3 using ternary.exe
- Output Size: 1.83263874053955 MiB
- Compilation Time: 0.45s

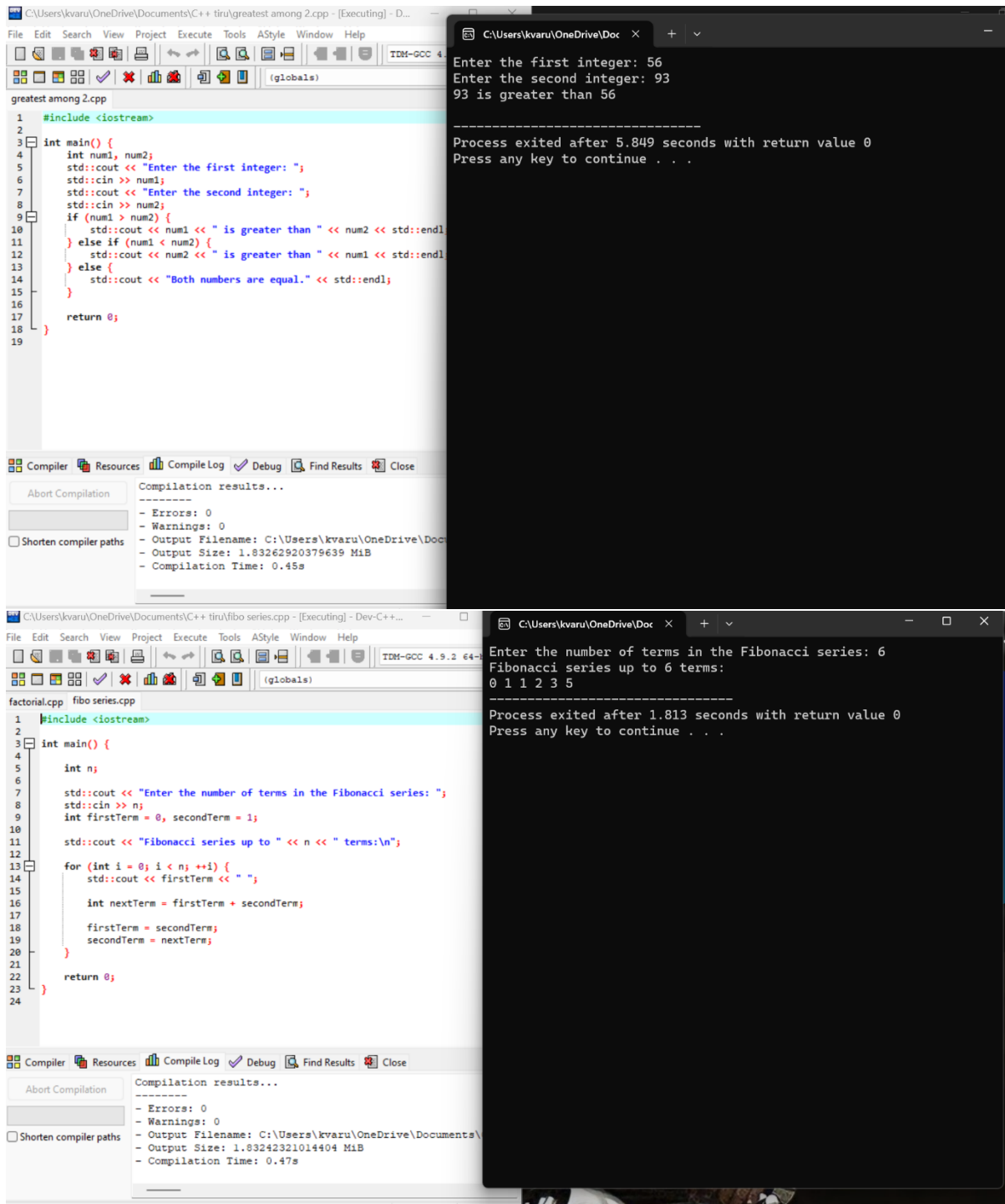
Shorten compiler paths

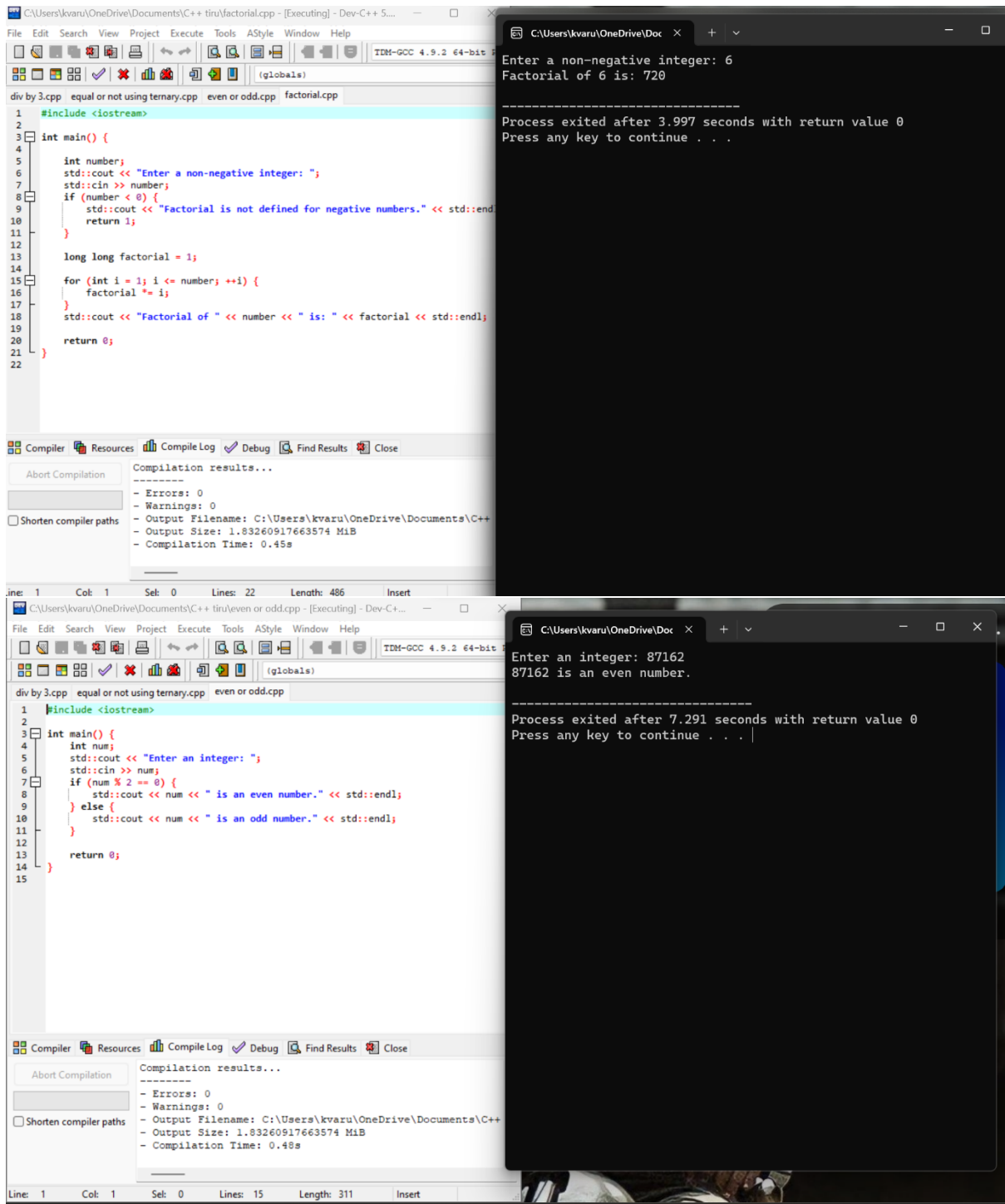
C:\Users\kvaru\OneDrive\Documents\C++ tiru\missing element.cpp - [Executing] - Dev...  
Smallest missing element: 2

-----  
Process exited after 0.1004 seconds with return value 0  
Press any key to continue . . .

C:\Users\kvaru\OneDrive\Documents\C++ tiru\largest in 3 using ternary.cpp - [Executing] - Dev...  
Enter the first number: 83  
Enter the second number: 29  
Enter the third number: 94  
The largest number among 83, 29, and 94 is: 94

-----  
Process exited after 7.357 seconds with return value 0  
Press any key to continue . . .





The image shows a C++ IDE with a code editor and an output window. The code in the editor is as follows:

```
1 #include <iostream>
2
3 int main() {
4     int num1, num2;
5
6     std::cout << "Enter the first number: ";
7     std::cin >> num1;
8
9     std::cout << "Enter the second number: ";
10    std::cin >> num2;
11    std::string result = (num1 == num2) ? "equal" : "not equal";
12
13    std::cout << "The numbers are " << result << "." << std::endl;
14
15    return 0;
16 }
17
```

The output window shows the following text:

```
Enter the first number: 73
Enter the second number: 73
The numbers are equal.

-----
Process exited after 10.32 seconds with return value 0
Press any key to continue . . .
```

The IDE's status bar at the bottom indicates the compilation results:

- Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\C++\ternary.cpp
- Output Size: 1.83562755584717 MiB
- Compilation Time: 0.44s

The screenshot shows the Visual Studio IDE with the following components:

- Source Code (display address.cpp):**

```

1 #include <iostream>
2
3 int main() {
4     int arr[] = {1, 2, 3, 4, 5};
5     int n = sizeof(arr) / sizeof(arr[0]);
6
7     std::cout << "Displaying address using arrays:" << std::endl;
8     for (int i = 0; i < n; ++i) {
9         std::cout << "Address of arr[" << i << "]: " << &arr[i] << std::endl;
10    }
11
12    return 0;
13 }
14

```
- Compiler Output (Bottom):**

Compilation results...

  - Errors: 0
  - Warnings: 0
  - Output Filename: C:\Users\kvaru\OneDrive\Documents\C++
  - Output Size: 1.83260917663574 MIB
  - Compilation Time: 0.49s
- Program Output (Right):**

```

Displaying address using arrays:
Address of arr[0]: 0x6ffdf0
Address of arr[1]: 0x6ffdf4
Address of arr[2]: 0x6ffdf8
Address of arr[3]: 0x6ffdfc
Address of arr[4]: 0x6ffe00

-----
Process exited after 0.09456 seconds with return value 0
Press any key to continue . . .

```



```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\avg of 3.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Rel
(globals)
[*] avg of 3.cpp
1 #include <iostream>
2
3 int main() {
4     int num1, num2, num3;
5
6     std::cout << "Enter the first integer: ";
7     std::cin >> num1;
8
9     std::cout << "Enter the second integer: ";
10    std::cin >> num2;
11
12    std::cout << "Enter the third integer: ";
13    std::cin >> num3;
14    double average = static_cast<double>(num1 + num2 + num3) / 3;
15    std::cout << "The average of " << num1 << ", " << num2 << ", and " << num3 << "
16    is: " << average << endl;
17    return 0;
18 }
19

Compiler Resources Compile Log Debug Find Results Close
Abort Compilation
Shorten compiler paths
Compilation results...
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\kvaru\OneDrive\Documents\C++
- Output Size: 1.83309745788574 MiB
- Compilation Time: 0.52s
```

```
C:\Users\kvaru\OneDrive\Doc
Enter the first integer: 67
Enter the second integer: 93
Enter the third integer: 76
The average of 67, 93, and 76 is: 78.6667

-----
Process exited after 31.42 seconds with return value 0
Press any key to continue . . .
```

```
C:\Users\kvaru\OneDrive\Documents\C++ tiru\Array in DO.cpp - [Executing] - Dev-C++ 5.11
File Edit Search View Project Execute Tools AStyle Window Help
TDM-GCC 4.9.2 64-bit Rel
(globals)
arith op(float).cpp arithmeti op.cpp Array in DO.cpp
1 #include <iostream>
2 #include <algorithm>
3
4 int main() {
5     int arr[] = {5, 2, 8, 1, 6};
6     int n = sizeof(arr) / sizeof(arr[0]);
7
8     std::sort(arr, arr + n);
9
10    std::cout << "Array in non-decreasing order:" << std::endl;
11    for (int i = 0; i < n; ++i) {
12        std::cout << arr[i] << " ";
13    }
14
15    return 0;
16 }
```

```
C:\Users\kvaru\OneDrive\Doc
Array in non-decreasing order:
1 2 5 6 8

-----
Process exited after 0.09493 seconds with return value 0
Press any key to continue . . .
```

