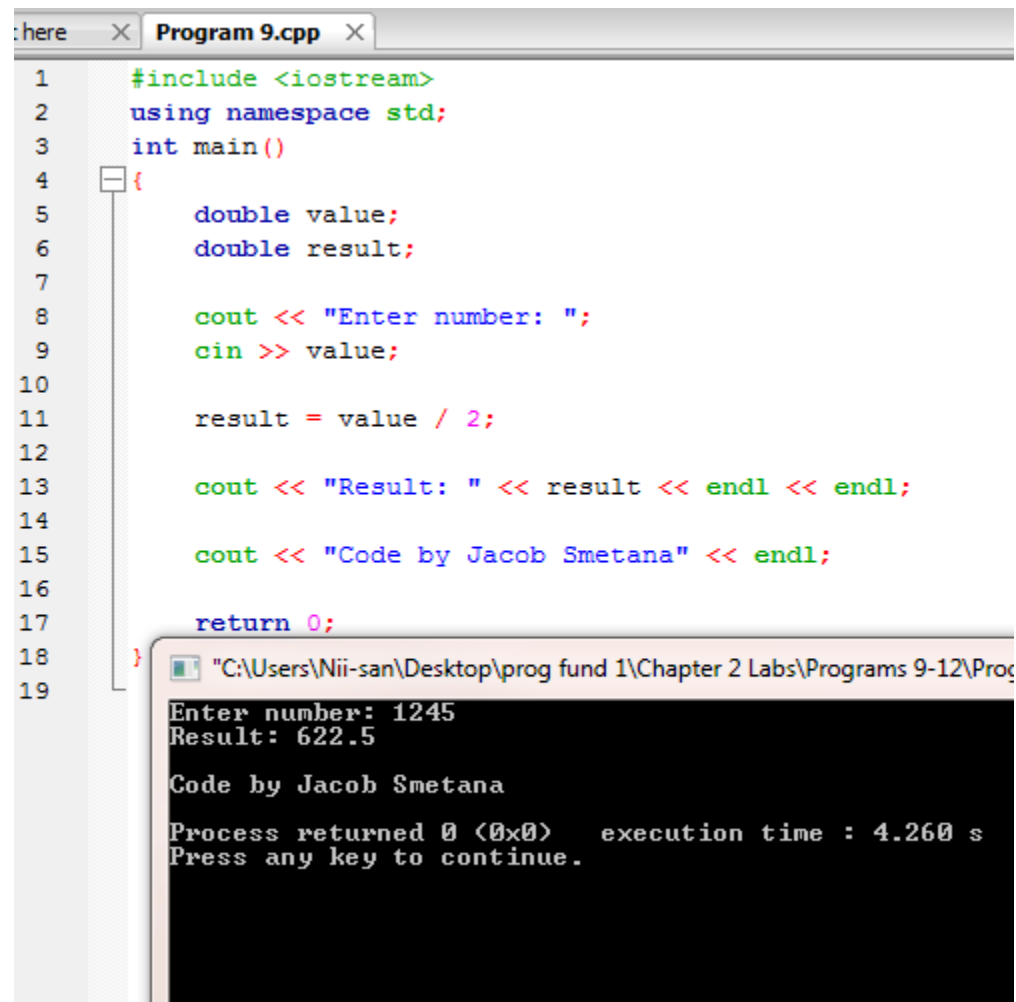


Programs 9-12

Program 9.



The image shows a code editor window titled "Program 9.cpp" with a line number margin on the left. The code is a C++ program that takes a number as input, divides it by 2, and prints the result. The code is as follows:

```
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double value;
6      double result;
7
8      cout << "Enter number: ";
9      cin >> value;
10
11     result = value / 2;
12
13     cout << "Result: " << result << endl << endl;
14
15     cout << "Code by Jacob Smetana" << endl;
16
17     return 0;
18 }
19
```

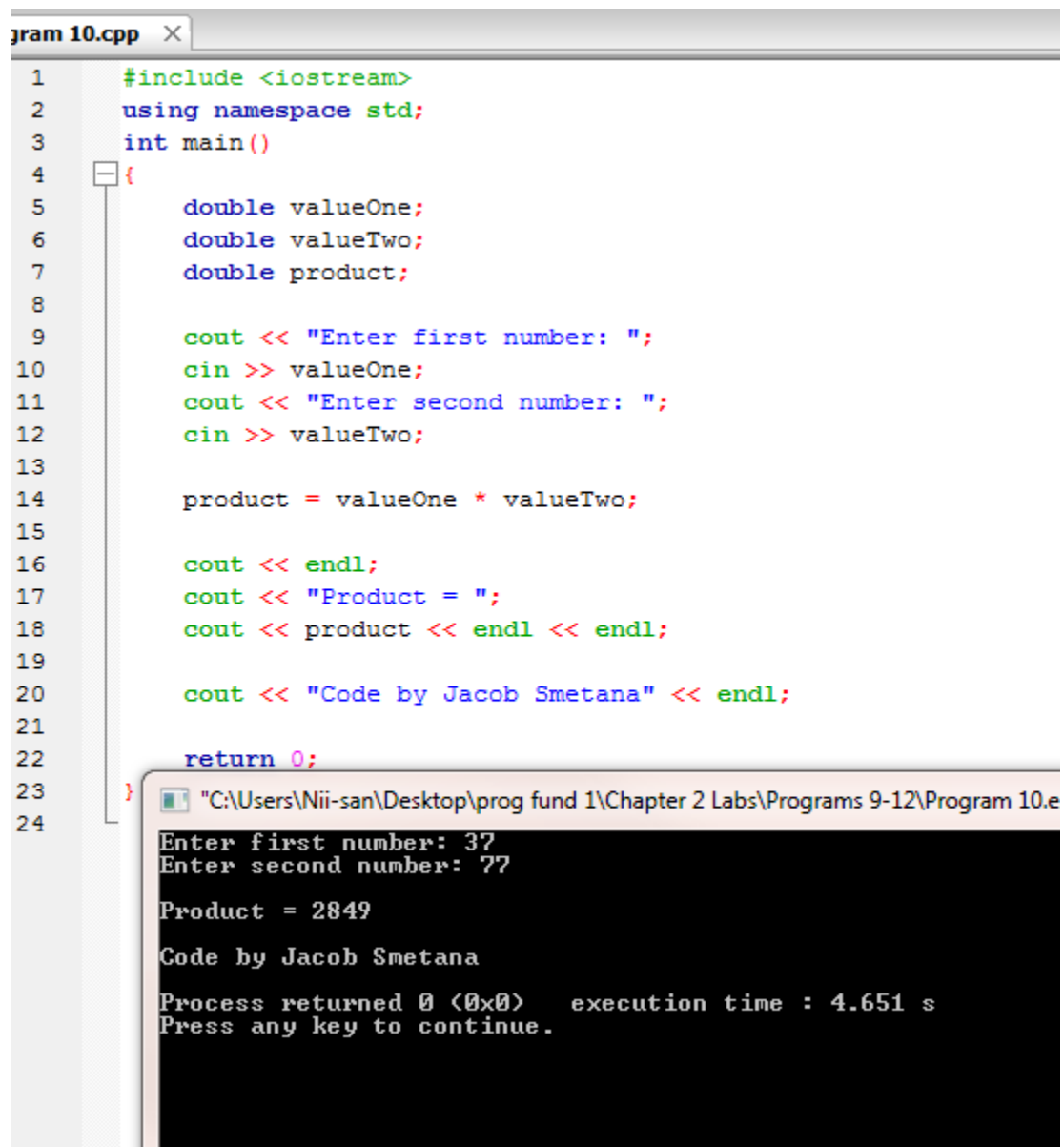
Below the code editor, a console window is open, showing the execution of the program. The output is as follows:

```
"C:\Users\Nii-san\Desktop\prog fund 1\Chapter 2 Labs\Programs 9-12\Prog
Enter number: 1245
Result: 622.5

Code by Jacob Smetana

Process returned 0 (0x0)   execution time : 4.260 s
Press any key to continue.
```

Program 10.



The image shows a code editor window titled "Program 10.cpp" with a line number margin on the left. The code is a C++ program that takes two numbers as input and calculates their product. The code is as follows:

```
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double valueOne;
6      double valueTwo;
7      double product;
8
9      cout << "Enter first number: ";
10     cin >> valueOne;
11     cout << "Enter second number: ";
12     cin >> valueTwo;
13
14     product = valueOne * valueTwo;
15
16     cout << endl;
17     cout << "Product = ";
18     cout << product << endl << endl;
19
20     cout << "Code by Jacob Smetana" << endl;
21
22     return 0;
23 }
24
```

Below the code editor, there is a terminal window showing the execution of the program. The terminal output is as follows:

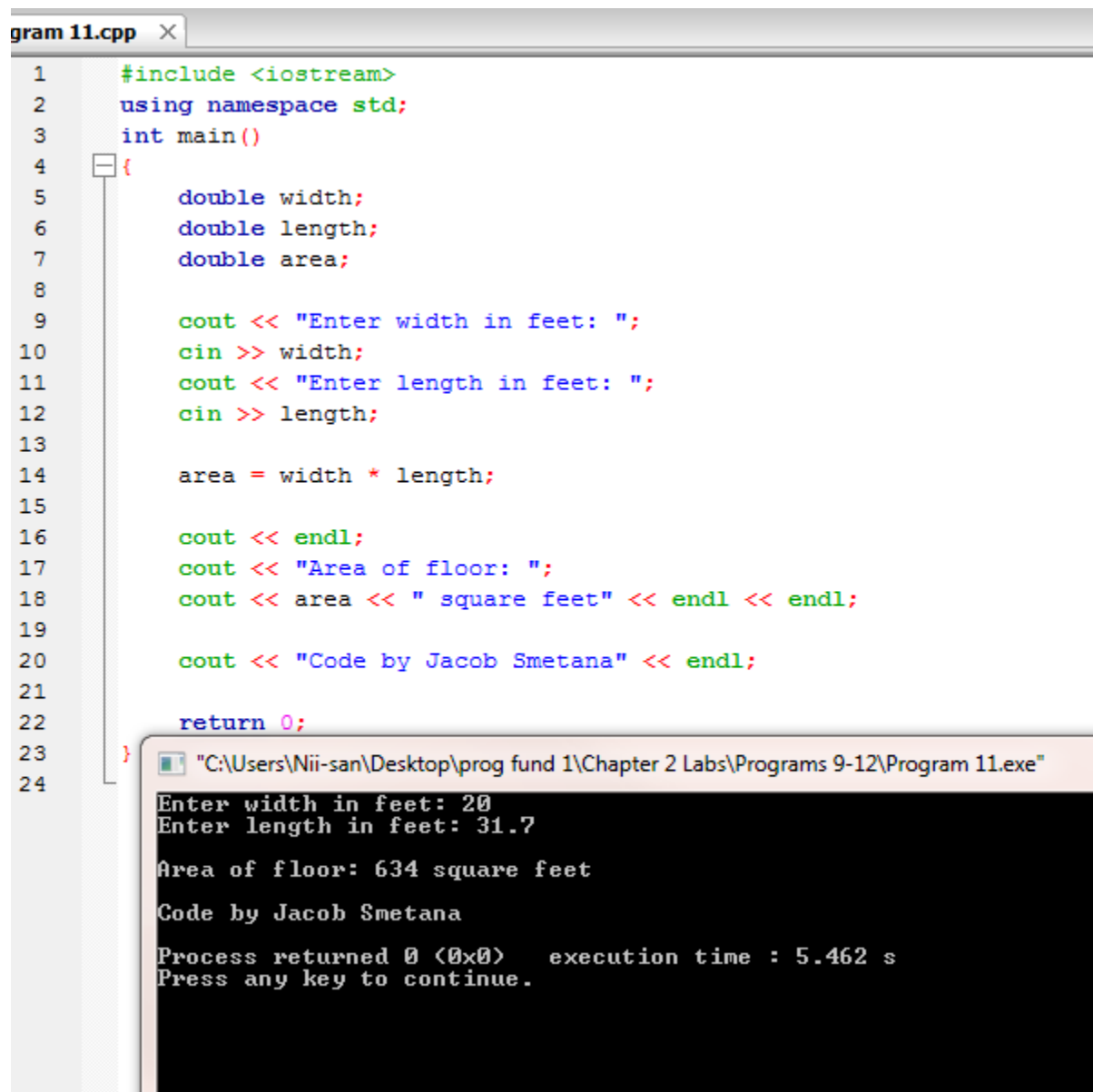
```
"C:\Users\Nii-san\Desktop\prog fund 1\Chapter 2 Labs\Programs 9-12\Program 10.e
Enter first number: 37
Enter second number: 77

Product = 2849

Code by Jacob Smetana

Process returned 0 (0x0)   execution time : 4.651 s
Press any key to continue.
```

Program 11.



The image shows a C++ IDE window titled "gram 11.cpp". The source code is as follows:

```
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double width;
6      double length;
7      double area;
8
9      cout << "Enter width in feet: ";
10     cin >> width;
11     cout << "Enter length in feet: ";
12     cin >> length;
13
14     area = width * length;
15
16     cout << endl;
17     cout << "Area of floor: ";
18     cout << area << " square feet" << endl << endl;
19
20     cout << "Code by Jacob Smetana" << endl;
21
22     return 0;
23 }
24
```

Below the code editor, the execution output is displayed in a black console window titled "C:\Users\Nii-san\Desktop\prog fund 1\Chapter 2 Labs\Programs 9-12\Program 11.exe". The output is:

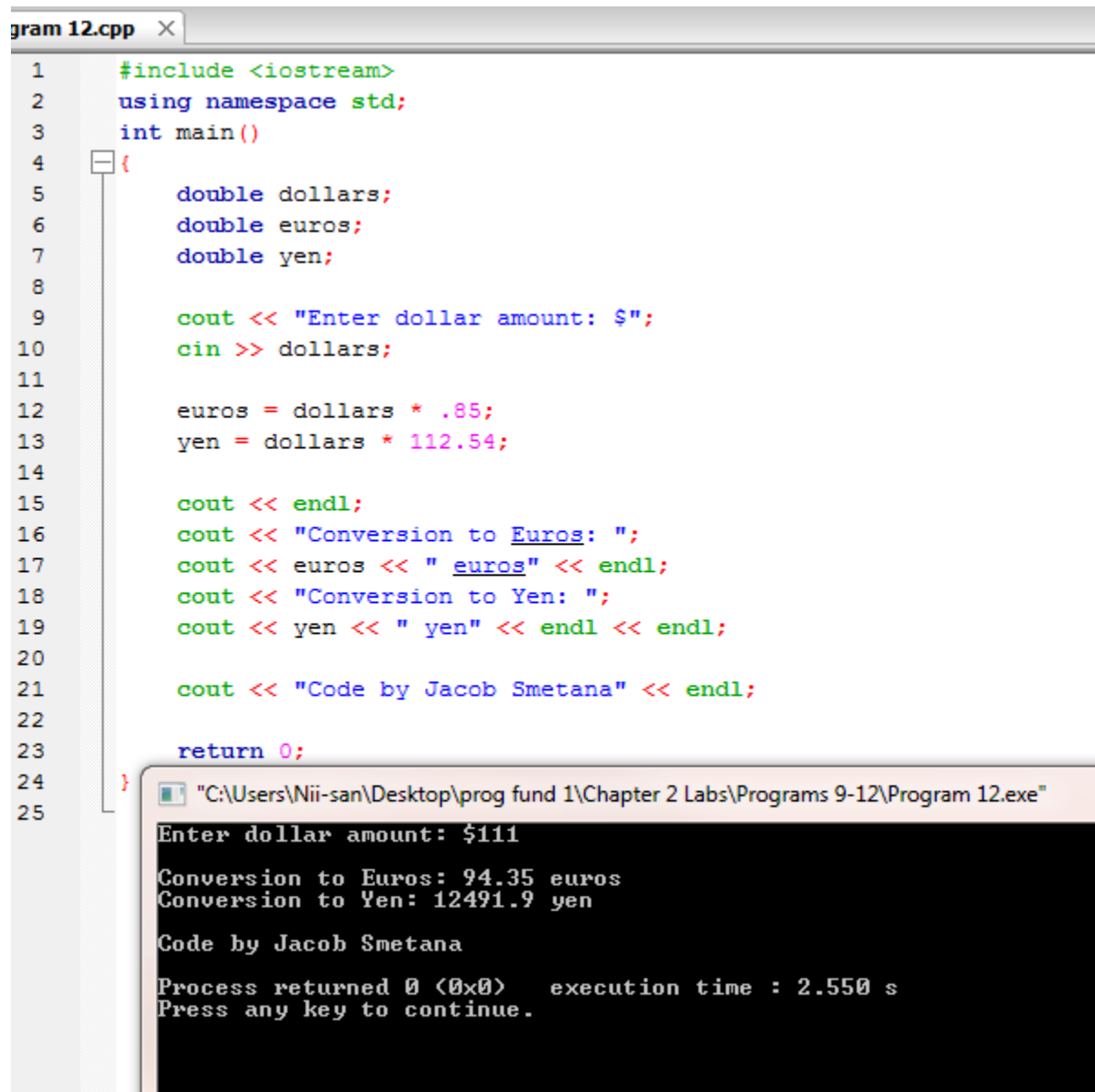
```
Enter width in feet: 20
Enter length in feet: 31.7

Area of floor: 634 square feet

Code by Jacob Smetana

Process returned 0 (0x0)   execution time : 5.462 s
Press any key to continue.
```

Program 12.



The image shows a code editor window titled 'gram 12.cpp' with a line number margin on the left. The code is a C++ program for currency conversion. It includes the `<iostream>` header, uses the `std` namespace, and defines a `main` function. Inside `main`, it declares three `double` variables: `dollars`, `euros`, and `yen`. It prompts the user to enter a dollar amount, reads it into `dollars`, and then calculates `euros` (dollars * 0.85) and `yen` (dollars * 112.54). It then outputs the results with formatted strings, including a copyright notice. Finally, it returns 0. Below the code editor, a separate window shows the program's execution. It displays the prompt 'Enter dollar amount: \$', the user input '111', and the calculated values: 'Conversion to Euros: 94.35 euros' and 'Conversion to Yen: 12491.9 yen'. It also shows the copyright notice and a message indicating the process returned 0 and took 2.550 seconds to execute.

```
1  #include <iostream>
2  using namespace std;
3  int main()
4  {
5      double dollars;
6      double euros;
7      double yen;
8
9      cout << "Enter dollar amount: $";
10     cin >> dollars;
11
12     euros = dollars * .85;
13     yen = dollars * 112.54;
14
15     cout << endl;
16     cout << "Conversion to Euros: ";
17     cout << euros << " euros" << endl;
18     cout << "Conversion to Yen: ";
19     cout << yen << " yen" << endl << endl;
20
21     cout << "Code by Jacob Smetana" << endl;
22
23     return 0;
24 }
25
```

"C:\Users\Nii-san\Desktop\prog fund 1\Chapter 2 Labs\Programs 9-12\Program 12.exe"

Enter dollar amount: \$111

Conversion to Euros: 94.35 euros

Conversion to Yen: 12491.9 yen

Code by Jacob Smetana

Process returned 0 (0x0) execution time : 2.550 s

Press any key to continue.