

The screenshot shows a C++ IDE with the following components:

- Projects Panel:** Lists various projects including Gaddis_9thEd_Chap2_Prob07_OceanLevels, Gaddis_9thEd_Chap2_Prob08_TotalPurchase, Gaddis_9thEd_Chap2_Prob10_MPG, and Gaddis_9thEd_Chap2_Prob18_EnergyDrinkConsumption.
- Source Editor:** Displays the code for `oceanlevels.cpp`. The code includes a header comment, system and user libraries, global constants, function prototypes, and a `main` function. The `main` function initializes variables for ocean level increases over 5, 7, and 10 years, calculates the total increase, and displays the results using `cout`.
- Output Window:** Shows the execution results of the program, displaying the number of years and the corresponding increase in sea level for each time period.

```
1  /*
2  File: oceanlevels.cpp
3  Author: Kevin Morris
4  Created on June 24, 2022, 6:32 PM
5  * Purpose: Assuming the ocean's level is currently rising
6  * at about 1.5 millimeters per year,
7  * write a program that displays:
8  * The number of millimeters higher than the current level that the ocean's level
9  * will be in 5 years.
10 * The number of millimeters higher than the current level that the ocean's level
11 * will be in 7 years.
12 * The number of millimeters higher than the current level that the ocean's level
13 * will be in 10 years.
14 */
15 //System Libraries
16 #include<iostream>
17 using namespace std;
18 //User Libraries
19 //Global Constants
20 //Mathematical/Physics/Conversions, Higher dimensioned arrays
21 //Function Prototypes
22 //Execution Begins Here
23 int main(int arg, char** argv) {
24 // Initialize the Random Number Seed
25 //Declare Variables
26 float crntLvlttn, crntLvlsvn, crntLvlfv;
27 crntLvlttn= //Ocean level increase in ten years.
28 crntLvlsvn=//Ocean level increase in seven years.
29 crntLvlfv= //Ocean level increase in five years.
30 //Initialize Variables
31 crntLvlttn=(1.5)*10;//Ocean level increase in ten years.
32 crntLvlsvn=(1.5)*7;//Ocean level increase in seven years.
33 crntLvlfv=(1.5)*5; //Ocean level increase in five years.
34 //Map inputs to outputs-> The Process
35 //Display Results
36 cout<<"Five years from now"<<endl;
37 cout<<"the ocean's sea level will be "<<(crntLvlfv);
38 cout<<" millimeters higher than the current sea level."<<endl;
39 cout<<"Seven years from now,"<<endl;
40 cout<<"the ocean's sea level will be "<<(crntLvlsvn);
```

Output - Gaddis_9thEd_Chap2_Prob07_OceanLevels (Run) X

```
Five years from now
the ocean's sea level will be 7.5 millimeters higher than the current sea level.
Seven years from now,
the ocean's sea level will be 10.5 millimeters higher than the current sea level.
Ten years from now,
the ocean's sea level will be 15 millimeters higher than the current sea level.
RUN SUCCESSFUL (total time: 733ms)
```

The screenshot shows a C++ IDE with the following components:

- Projects Panel:** Lists various projects including 'CPPTemplate', 'Gaddis_9Ed_Chap2_Prob20_HowMuchPaint', 'Gaddis_9thEd_Chap2_Prob07_OceanLevels', 'Header Files', 'Resource Files', 'Source Files', 'Test Files', 'Important Files', 'Gaddis_9thEd_Chap2_Prob08_TotalPurchase', 'Gaddis_9thEd_Chap2_Prob10_MPG', and 'Gaddis_9thEd_Chap2_Prob18_EnergyDrinkConsumption'.
- Source Editor:** Displays the code for 'oceanlevels.cpp'. The code calculates sea level rise over 5, 7, and 10 years based on a constant rate of 1.5 mm per year.
- Navigator:** Shows the function 'main(int arg, char** argv)'.
- Output Console:** Shows the execution results of the program.

```
8  * The number of millimeters higher than the current level that the ocean's level
9  * will be in 5 years.
10 * The number of millimeters higher than the current level that the ocean's level
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23 int main(int arg, char** argv) {
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31     crntLvlttn=(1.5)*10;//Ocean level increase in ten years.
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34     //Map inputs to outputs-> The Process
35     //Display Results
36     cout<<"Five years from now"<<endl;
37     cout<<"the ocean's sea level will be "<<(crntLvlfv);
38     cout<<" millimeters higher than the current sea level."<<endl;
39     cout<<"Seven years from now,"<<endl;
40     cout<<"the ocean's sea level will be "<<(crntLvlsvn);
41     cout<<" millimeters higher than the current sea level."<<endl;
42     cout<<"Ten years from now,"<<endl;
43     cout<<"the ocean's sea level will be "<<(crntLvlttn);
44     cout<<" millimeters higher than the current sea level.";
45     //Exit stage right
46     return 0;
47 }
```

Output - Gaddis_9thEd_Chap2_Prob07_OceanLevels (Run) X

```
Five years from now
the ocean's sea level will be 7.5 millimeters higher than the current sea level.
Seven years from now,
the ocean's sea level will be 10.5 millimeters higher than the current sea level.
Ten years from now,
the ocean's sea level will be 15 millimeters higher than the current sea level.
RUN SUCCESSFUL (total time: 733ms)
```