



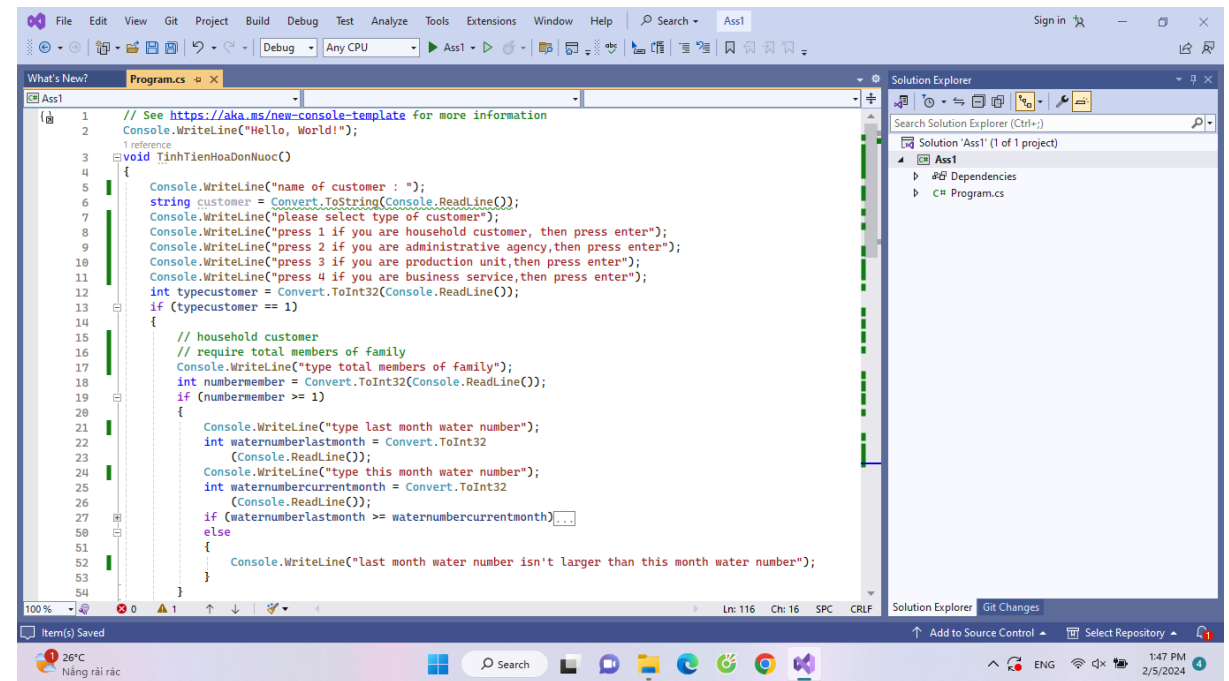
programming

P2 : code

First ,input name of customer ,then type select type of customer

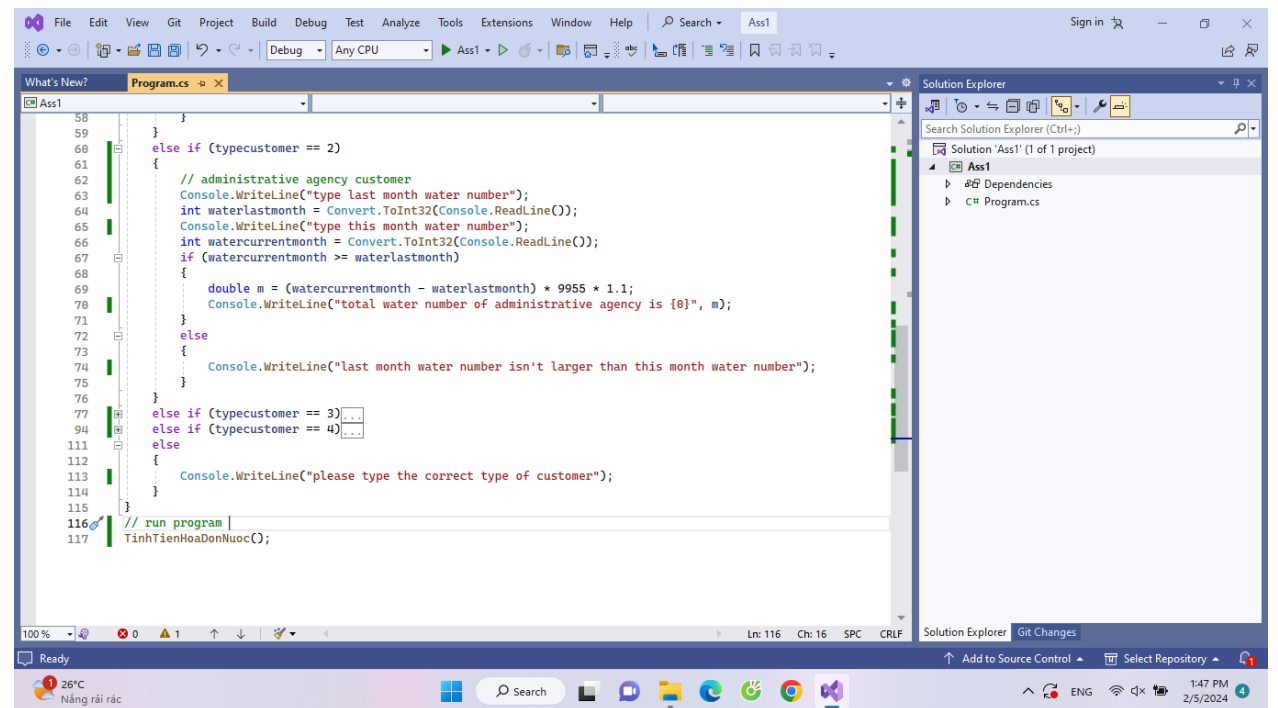
Begin with household customer

First type total member of family then use if else command to calculate this month and last month water number and you done



```
1 // See https://aka.ms/new-console-template for more information
2 Console.WriteLine("Hello, World!");
3
4 void TinhTienHoaDonNuoc()
5 {
6     Console.WriteLine("name of customer : ");
7     string customer = Convert.ToString(Console.ReadLine());
8     Console.WriteLine("please select type of customer");
9     Console.WriteLine("press 1 if you are household customer, then press enter");
10    Console.WriteLine("press 2 if you are administrative agency, then press enter");
11    Console.WriteLine("press 3 if you are production unit, then press enter");
12    Console.WriteLine("press 4 if you are business service, then press enter");
13    int typecustomer = Convert.ToInt32(Console.ReadLine());
14    if (typecustomer == 1)
15    {
16        // household customer
17        // require total members of family
18        Console.WriteLine("type total members of family");
19        int numbermember = Convert.ToInt32(Console.ReadLine());
20        if (numbermember >= 1)
21        {
22            Console.WriteLine("type last month water number");
23            int waternumberlastmonth = Convert.ToInt32(Console.ReadLine());
24            Console.WriteLine("type this month water number");
25            int waternumbercurrentmonth = Convert.ToInt32(Console.ReadLine());
26            if (waternumberlastmonth >= waternumbercurrentmonth)
27            {
28                Console.WriteLine("last month water number isn't larger than this month water number");
29            }
30            else
31            {
32            }
33        }
34    }
35 }
```

Now we go to administrative agency
First we input water number of last month
and this month and then we use if else
command to calculate total water number
of administrative agency and output is
the result



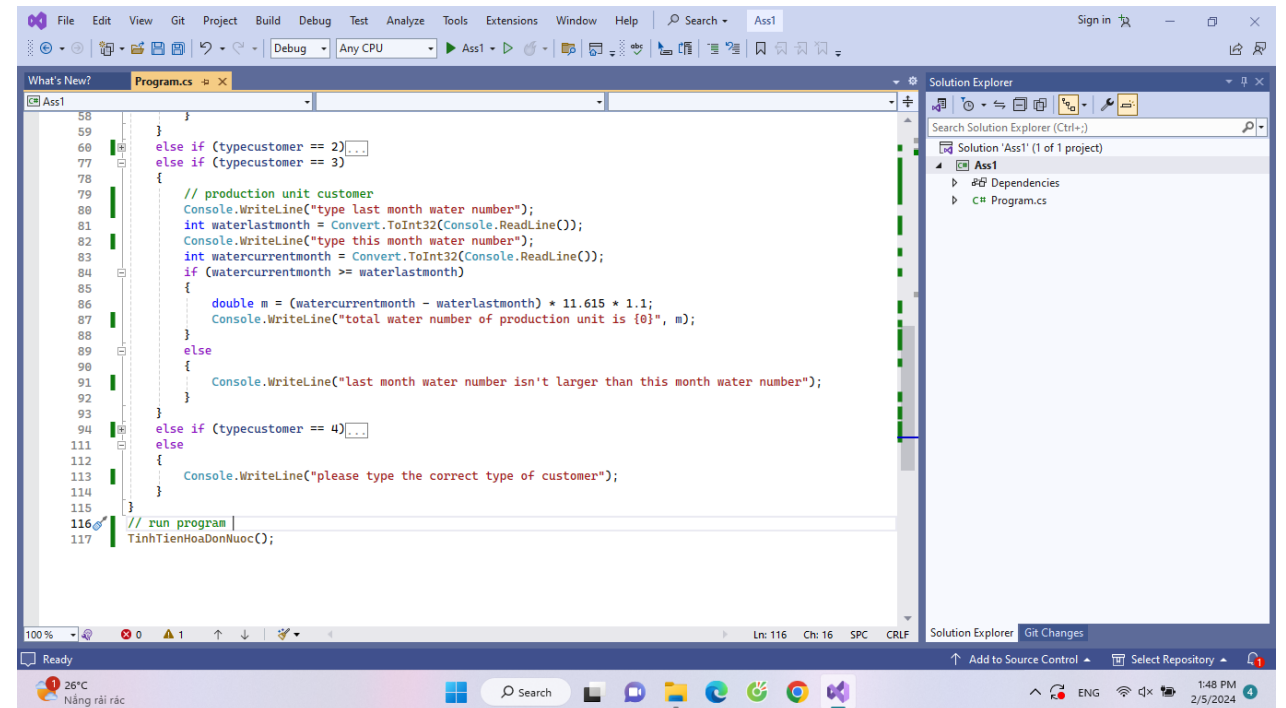
The screenshot shows the Visual Studio IDE with a C# program open in the editor. The program is named 'Ass1' and is located in 'Program.cs'. The code is as follows:

```
58 }
59 }
60 else if (typecustomer == 2)
61 {
62     // administrative agency customer
63     Console.WriteLine("type last month water number");
64     int waterLastmonth = Convert.ToInt32(Console.ReadLine());
65     Console.WriteLine("type this month water number");
66     int watercurrentmonth = Convert.ToInt32(Console.ReadLine());
67     if (watercurrentmonth >= waterLastmonth)
68     {
69         double m = (watercurrentmonth - waterLastmonth) * 9955 * 1.1;
70         Console.WriteLine("total water number of administrative agency is {0}", m);
71     }
72     else
73     {
74         Console.WriteLine("last month water number isn't larger than this month water number");
75     }
76 }
77 else if (typecustomer == 3)
78 {
79 }
80 else if (typecustomer == 4)
81 {
82 }
83 else
84 {
85     Console.WriteLine("please type the correct type of customer");
86 }
87 }
88 }
89 }
90 }
91 }
92 }
93 }
94 }
95 }
96 }
97 }
98 }
99 }
100 }
101 }
102 }
103 }
104 }
105 }
106 }
107 }
108 }
109 }
110 }
111 }
112 }
113 }
114 }
115 }
116 // run program
117 TinhTienHoaDonNuoc();
```

The Solution Explorer on the right shows the project structure for 'Ass1', including 'Dependencies' and 'C# Program.cs'. The status bar at the bottom indicates the file is at line 116, column 16, with a CRLF line ending. The Windows taskbar at the very bottom shows the date as 2/5/2024 and the time as 1:47 PM.

The same as agency, first input the water number of current month and last month

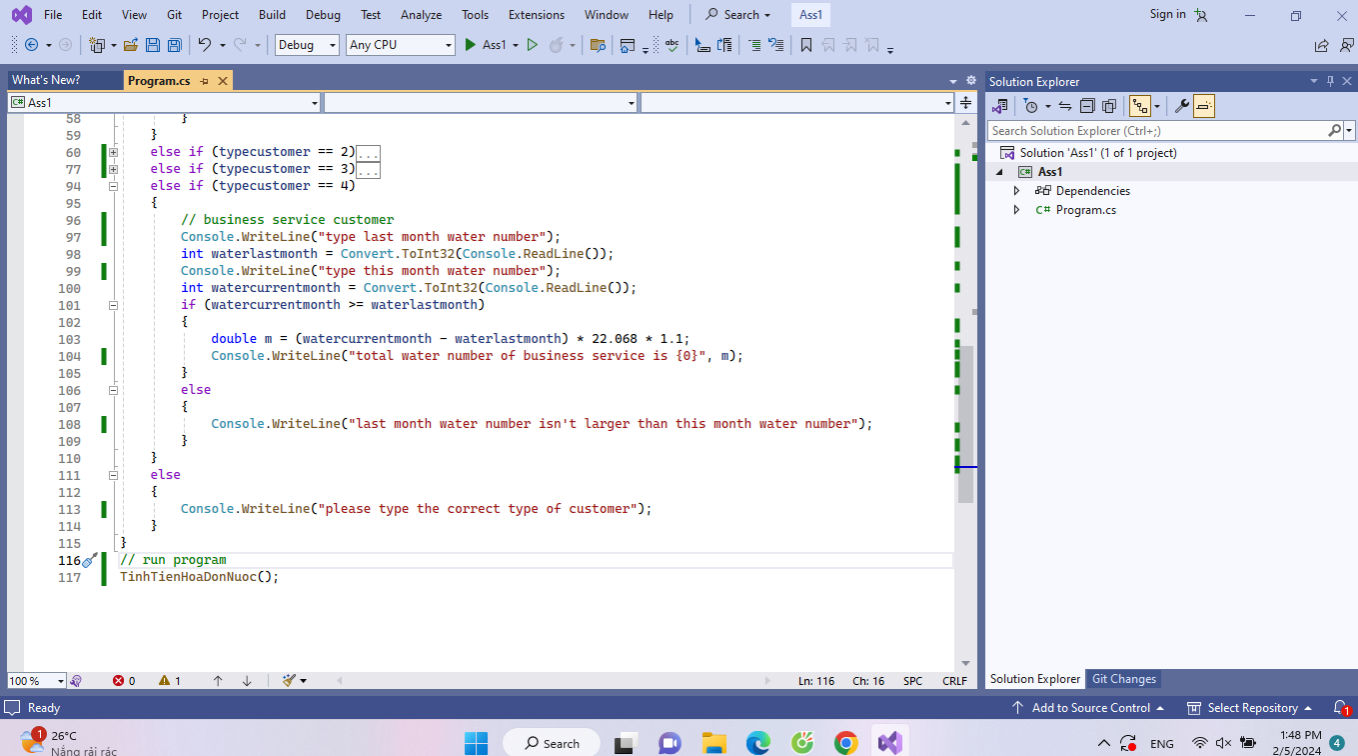
Then use if else command to calculate total water number and the output is result



```
58 }
59 }
60 else if (typecustomer == 2)
61 else if (typecustomer == 3)
62 {
63     // production unit customer
64     Console.WriteLine("type last month water number");
65     int waterlastmonth = Convert.ToInt32(Console.ReadLine());
66     Console.WriteLine("type this month water number");
67     int watercurrentmonth = Convert.ToInt32(Console.ReadLine());
68     if (watercurrentmonth >= waterlastmonth)
69     {
70         double m = (watercurrentmonth - waterlastmonth) * 11.615 * 1.1;
71         Console.WriteLine("total water number of production unit is {0}", m);
72     }
73     else
74     {
75         Console.WriteLine("last month water number isn't larger than this month water number");
76     }
77 }
78 else if (typecustomer == 4)
79 else
80 {
81     Console.WriteLine("please type the correct type of customer");
82 }
83 }
84 // run program |
85 TinhTienHoaDonNuoc();
```

The screenshot shows the Visual Studio Code interface with a C# file named Program.cs. The code implements a program that calculates water usage fees based on customer type and water numbers for the current and last month. The code is structured with nested if-else statements. The Solution Explorer on the right shows a project named 'Ass1' with a file named 'Program.cs'. The status bar at the bottom indicates the file is at line 116, column 16, and the system tray shows the date and time as 1:48 PM on 2/5/2024.

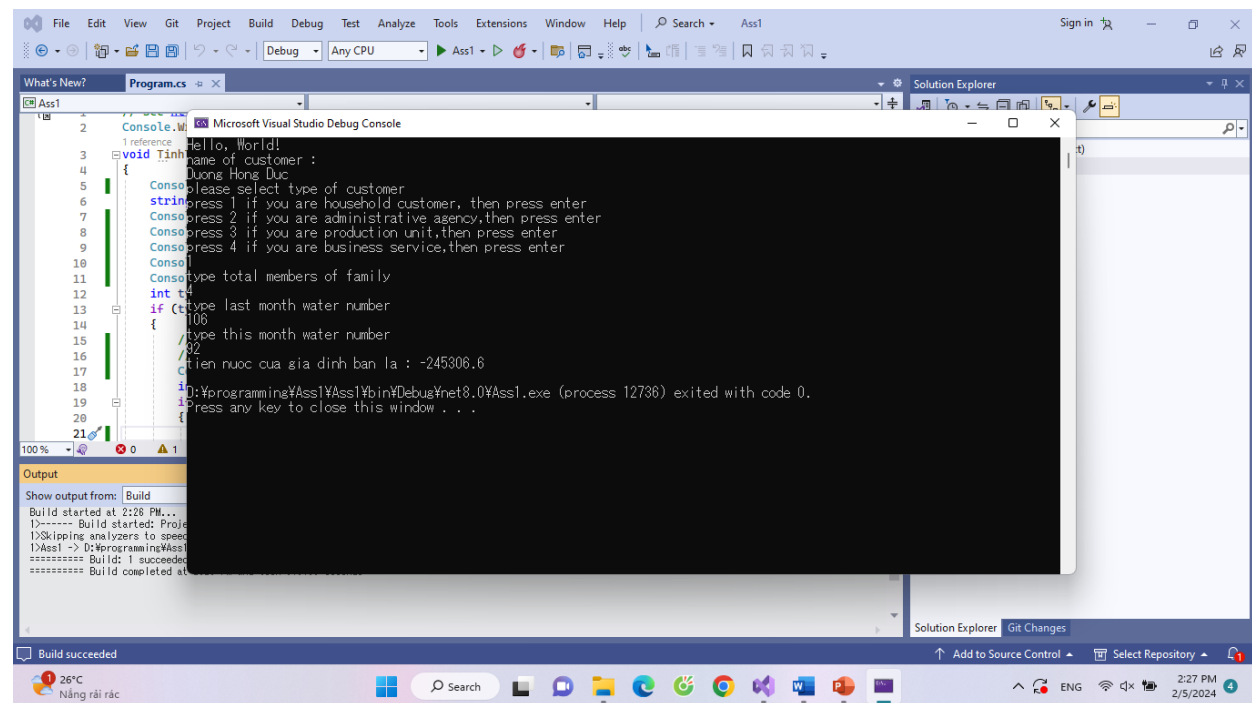
Same as the other 2 ,input water number current and last month ,use if else and then result is the output,after all done , we run the program



```
58     }
59     }
60     else if (typecustomer == 2)
61     {
62         Console.WriteLine("type last month water number");
63         int waterlastmonth = Convert.ToInt32(Console.ReadLine());
64         Console.WriteLine("type this month water number");
65         int watercurrentmonth = Convert.ToInt32(Console.ReadLine());
66         if (watercurrentmonth >= waterlastmonth)
67         {
68             double m = (watercurrentmonth - waterlastmonth) * 22.068 * 1.1;
69             Console.WriteLine("total water number of business service is {0}", m);
70         }
71         else
72         {
73             Console.WriteLine("last month water number isn't larger than this month water number");
74         }
75     }
76     else
77     {
78         Console.WriteLine("please type the correct type of customer");
79     }
80 }
81
82 // run program
83 TinhTienHoaDonNuoc();
```

The screenshot shows the Visual Studio IDE with a C# program open in the editor. The program logic is as follows: It starts with a loop (lines 58-80) that checks the customer type. If the type is 2, it prompts for last month's water number and this month's water number. It then compares the current month's usage with the last month's usage. If the current usage is greater than or equal to the last month's usage, it calculates the total water number of business service using the formula: $(\text{watercurrentmonth} - \text{waterlastmonth}) \times 22.068 \times 1.1$ and prints the result. If the current usage is less than the last month's usage, it prints a message: "last month water number isn't larger than this month water number". If the customer type is not 2, it prints a message: "please type the correct type of customer". After the loop, it calls the `TinhTienHoaDonNuoc()` method (lines 82-83). The Solution Explorer on the right shows the project structure with a folder named 'Ass1' containing 'Dependencies' and 'C# Program.cs'. The status bar at the bottom indicates the file is at line 116, column 16, and the system tray shows the date and time as 1:48 PM on 2/5/2024.

This is how the
program run



The screenshot shows the Visual Studio IDE with a C# program running. The code in Program.cs is as follows:

```
1 Console.WriteLine("Hello, World!");
2
3 void Main()
4 {
5     Console.WriteLine("Name of customer :");
6     string name = Console.ReadLine();
7     Console.WriteLine("Please select type of customer");
8     Console.WriteLine("press 1 if you are household customer, then press enter");
9     Console.WriteLine("press 2 if you are administrative agency, then press enter");
10    Console.WriteLine("press 3 if you are production unit, then press enter");
11    Console.WriteLine("press 4 if you are business service, then press enter");
12    Console.WriteLine("type total members of family");
13    int totalMembers = Console.ReadLine();
14    if (totalMembers > 0)
15    {
16        Console.WriteLine("type last month water number");
17        int lastMonthWaterNumber = Console.ReadLine();
18        Console.WriteLine("type this month water number");
19        int thisMonthWaterNumber = Console.ReadLine();
20        Console.WriteLine("Tien nuoc cua gia dinh ban la : -245306.6");
21    }
22 }
```

The Microsoft Visual Studio Debug Console shows the following output:

```
1 Hello, World!
2
3 Name of customer :
4 Duong Hong Duc
5
6 Please select type of customer
7 press 1 if you are household customer, then press enter
8 press 2 if you are administrative agency, then press enter
9 press 3 if you are production unit, then press enter
10 press 4 if you are business service, then press enter
11
12 type total members of family
13
14 type last month water number
15 106
16 type this month water number
17 92
18 Tien nuoc cua gia dinh ban la : -245306.6
19
20 D:\programming\Ass1\Ass1\bin\Debug\net8.0\Ass1.exe (process 12736) exited with code 0.
21 Press any key to close this window . . .
```

The Output window shows the build process:

```
Show output from: Build
Build started at 2:28 PM...
1>----- Build started: Project: Ass1
1>Skipping analyzers to speed up build
1>Ass1 -> D:\programming\Ass1\Ass1\bin\Debug\net8.0\Ass1.exe
***** Build: 1 succeeded
***** Build completed at 2:28 PM
```

The status bar at the bottom indicates "Build succeeded".