

Ardit Krasniqi

Drejtimi: Shkenca Kompjuterike

Kampusi: Prishtinë/ Lipjan

Viti: I parë

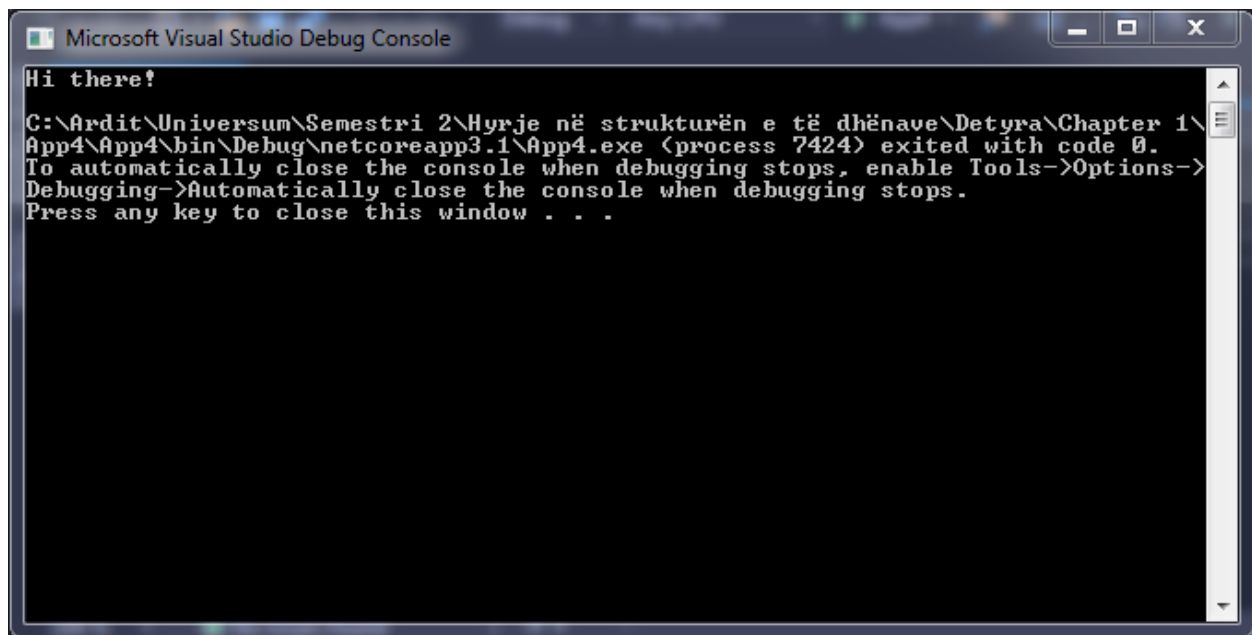
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Chapter 1

1. Install and make yourself familiar with **Microsoft Visual Studio** and Microsoft Developer Network (**MSDN**) Library Documentation.
2. Find the description of the **System.Console** class in the standard .NET API documentation (MSDN Library).
3. Find the description of the **System.Console.WriteLine()** method and its different possible parameters in the MSDN Library.
4. **Compile and execute** the sample program from this chapter using the command prompt (the console) and Visual Studio.

```
using System;

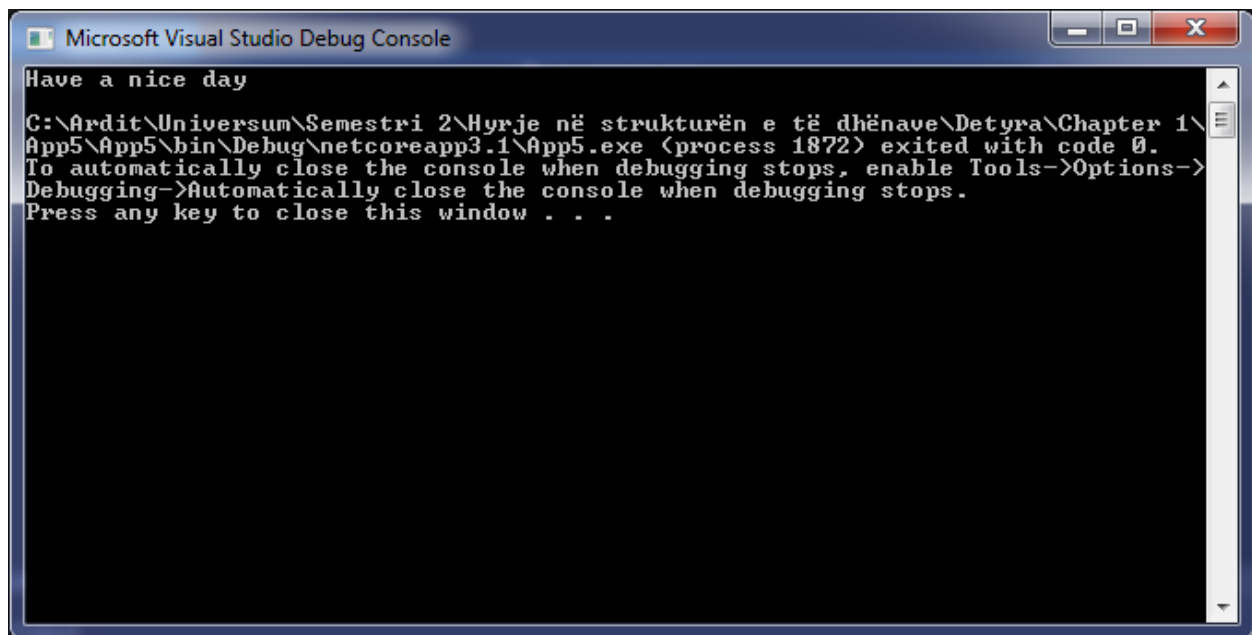
namespace App4
{
    class HelloCSharp
    {
        static void Main()
        {
            System.Console.WriteLine("Hi there!");
        }
    }
}
```



5. **Modify** the sample program to print a different greeting, for example "Good Day!".

```
using System;

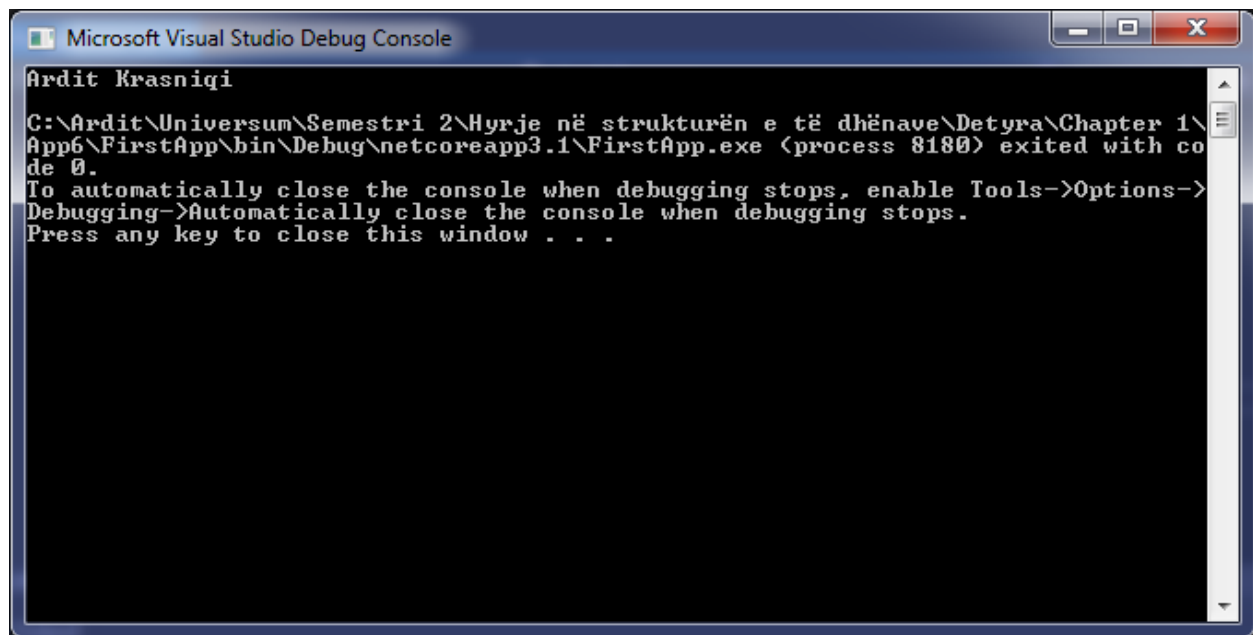
namespace App5
{
    class HelloCSharp
    {
        static void Main()
        {
            System.Console.WriteLine("Have a nice day");
        }
    }
}
```



6. Write a console application that **prints your first and last name** on the console.

```
using System;

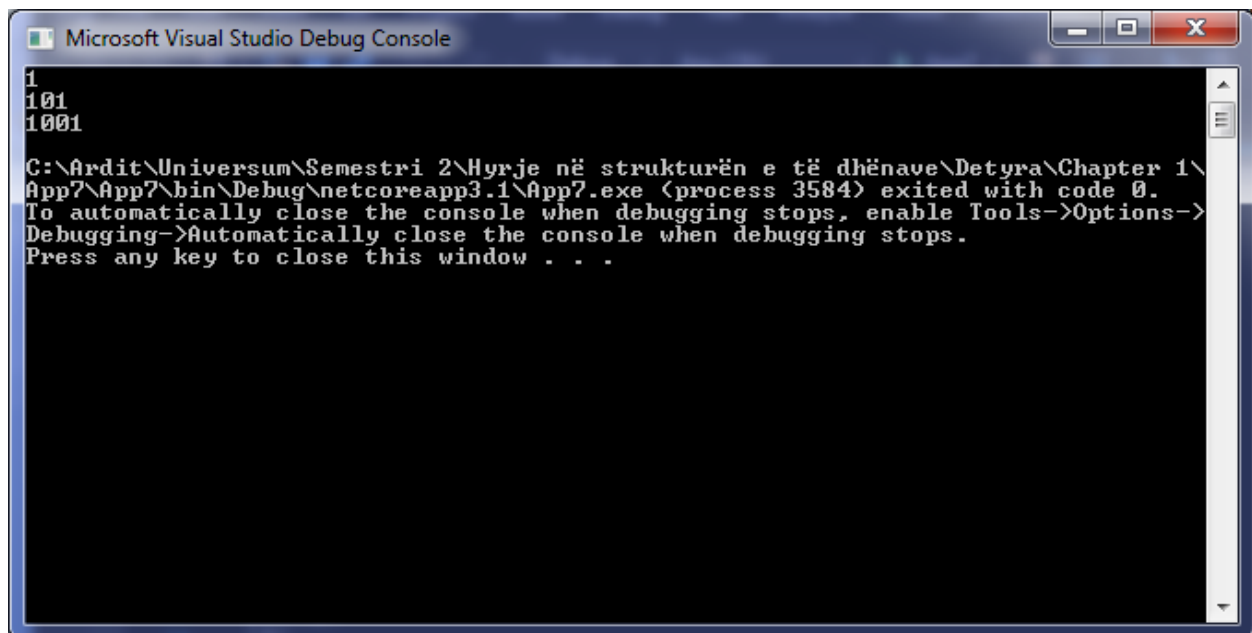
namespace App6
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Ardit Krasniqi");
        }
    }
}
```



7. Write a program that **prints the following numbers** on the console 1, 101, 1001, each on a new line.

```
using System;

namespace App7
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("1");
            Console.WriteLine("101");
            Console.WriteLine("1001");
        }
    }
}
```

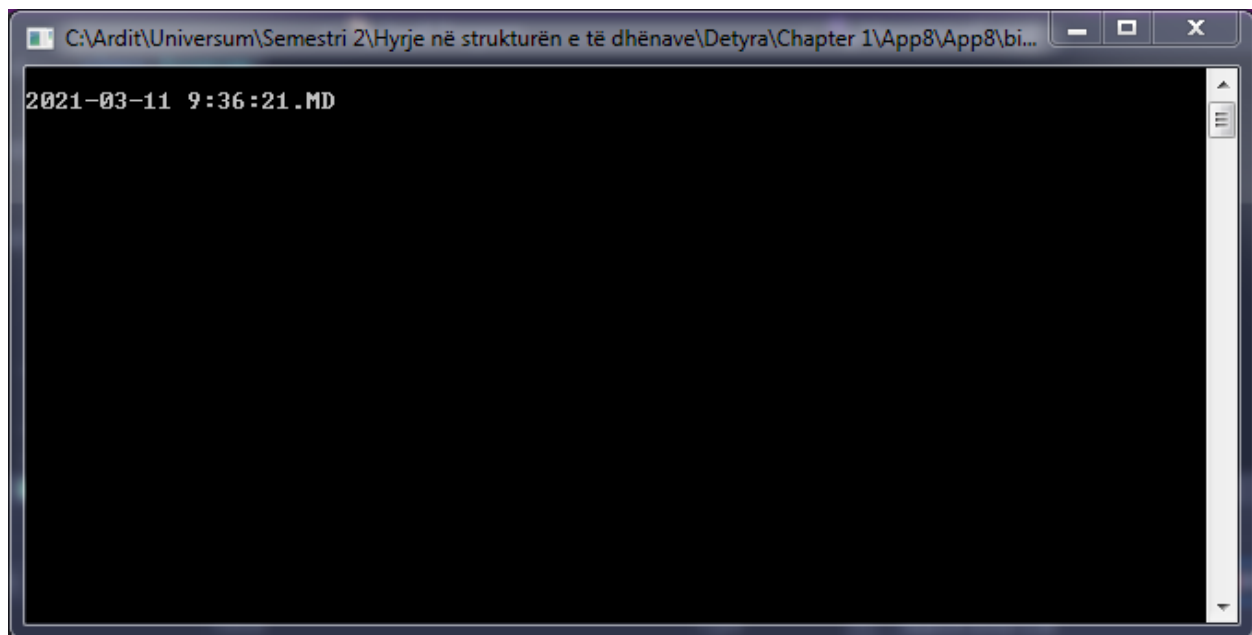


The screenshot shows the Microsoft Visual Studio Debug Console window. The output of the program is displayed on the first three lines: "1", "101", and "1001". Below the output, a message is shown: "C:\Ardit\Universum\Semestri 2\Hyrje në strukturën e të dhënave\Detyra\Chapter 1\App7\App7\bin\Debug\netcoreapp3.1\App7.exe (process 3584) exited with code 0. To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops. Press any key to close this window . . .".

8. Write a program that prints on the console the **current date and time**.

```
using System;

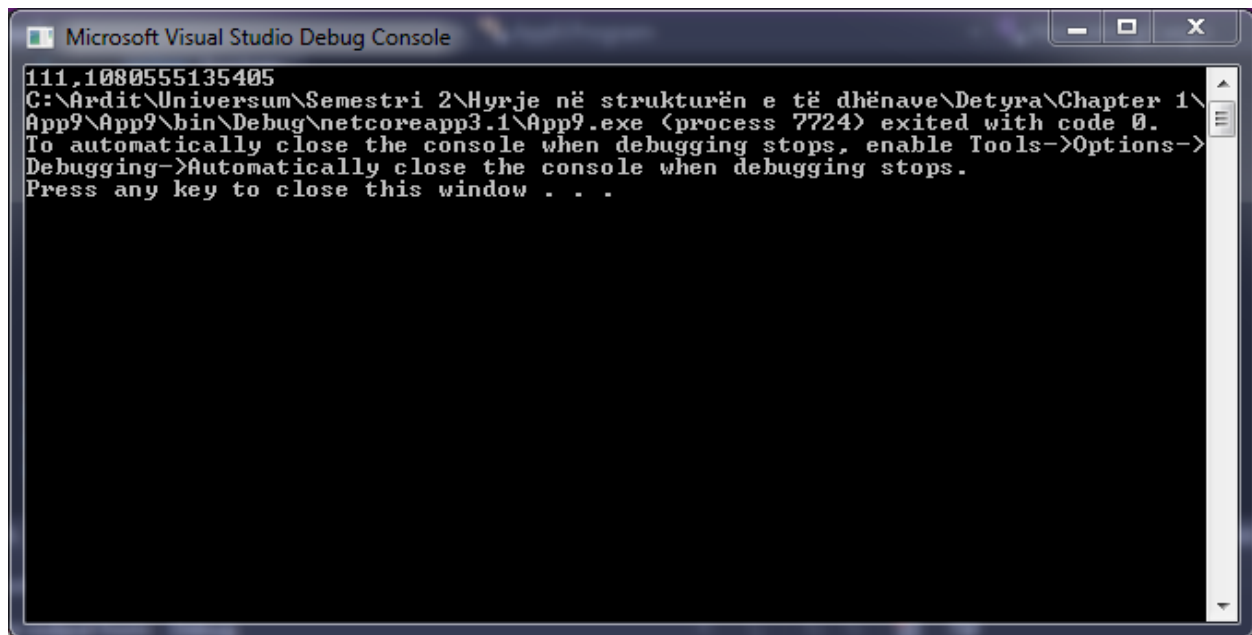
namespace App8
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("");
            {
                DateTime now = DateTime.Now;
                Console.WriteLine(now);
                Console.ReadLine();
            }
        }
    }
}
```



9. Write a program that prints the **square root of 12345**.

```
using System;

namespace App9
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine(Math.Sqrt(12345));
        }
    }
}
```



10. Write a program that prints the first 100 members of the **sequence** 2, -3, 4, -5, 6, -7, 8.

```
using System;
```

```
namespace App10
```

```
{
```

```
    class Program
```

```
    {
```

```
        static void Main(string[] args)
```

```
        {
```

```
            int number;
```

```
            for (int i = 2; i <= 100; i++)
```

```
            {
```

```
                if (i % 2 == 0)
```

```
                {
```

```
                    Console.WriteLine(i);
```

```
                }
```

```
            else
```

```
            {
```

```
                Console.WriteLine(i * (-1));
```

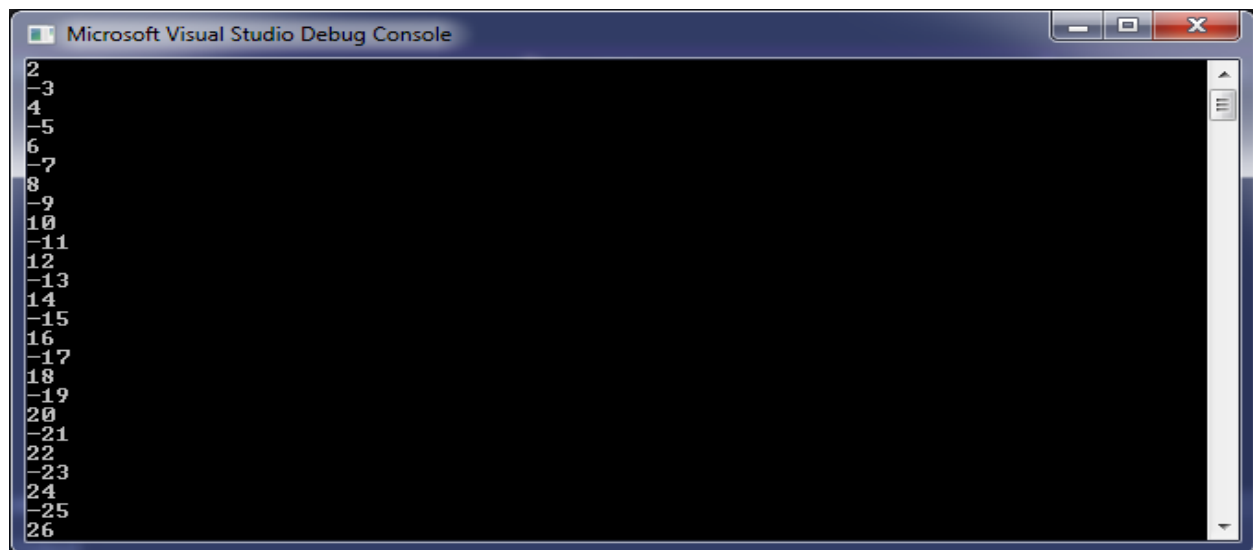
```
            }
```

```
        }
```

```
    }
```

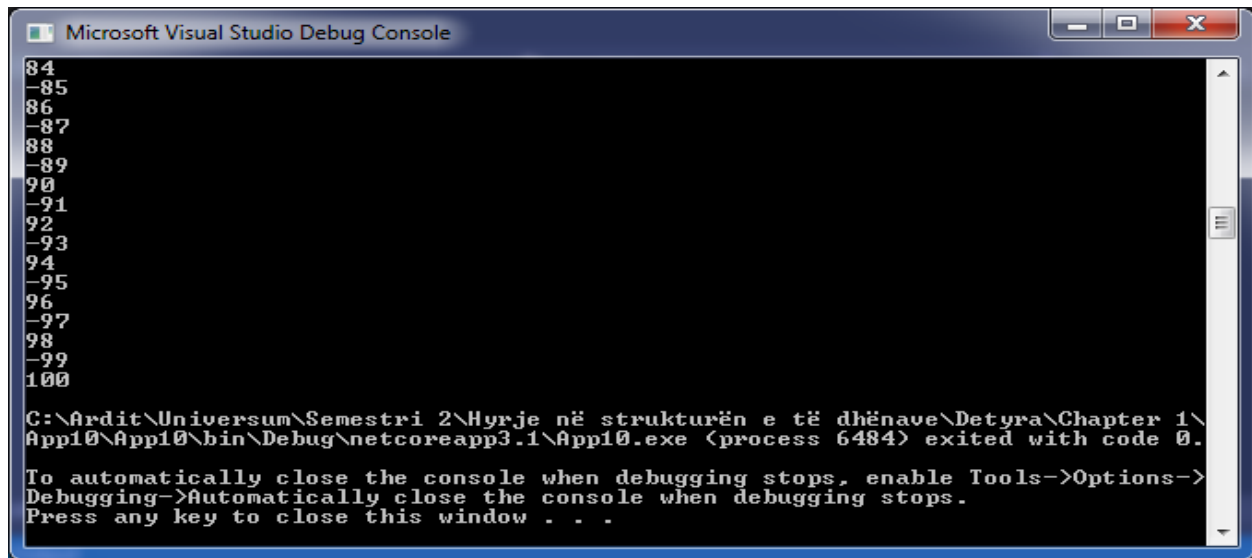
```
}
```

```
}
```



```
Microsoft Visual Studio Debug Console
```

```
2  
-3  
4  
-5  
6  
-7  
8  
-9  
10  
-11  
12  
-13  
14  
-15  
16  
-17  
18  
-19  
20  
-21  
22  
-23  
24  
-25  
26
```

```
Microsoft Visual Studio Debug Console

84
85
86
87
88
89
90
91
92
93
94
95
96
97
98
99
100

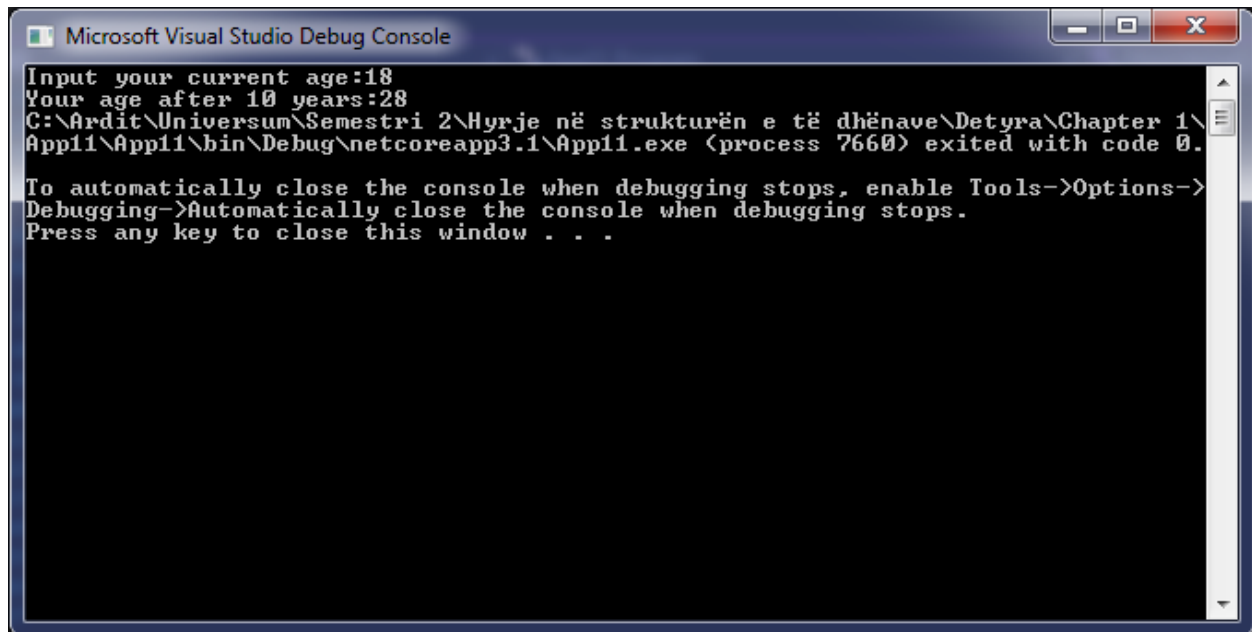
C:\Ardit\Universum\Semestri 2\Hyrje në strukturën e të dhënave\Detyra\Chapter 1\
App10\App10\bin\Debug\netcoreapp3.1\App10.exe <process 6484> exited with code 0.

To automatically close the console when debugging stops, enable Tools->Options->
Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

11. Write a program that reads your age from the console and prints your **age after 10 years**.

```
using System;

namespace App11
{
    class Program
    {
        static void Main(string[] args)
        {
            Console.WriteLine("Input your current age:");
            int age = Convert.ToInt32(Console.ReadLine());
            Console.WriteLine("Your age after 10 years:");
            age = age + 10;
            Console.WriteLine("{0} ", age);
        }
    }
}
```



```
Microsoft Visual Studio Debug Console

Input your current age:18
Your age after 10 years:28
C:\Ardit\Universum\Semestri 2\Hyrje në strukturën e të dhënave\Detyra\Chapter 1\
App11\App11\bin\Debug\netcoreapp3.1\App11.exe <process 7660> exited with code 0.

To automatically close the console when debugging stops, enable Tools->Options->
Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

12. Describe the difference between **C#** and the **.NET Framework**.

-In simple terms, C# is a programming language.NET is the framework on which the language is built.NET supports many programming languages,and defines the rules and associated libraries those languages will use.

13. Make a list of the **most popular programming** languages. How are they different from C#?

1. Java
2. Python
3. C
4. Ruby
5. JavaScript
7. PHP
- 8.C#

14. **Decompile** the example program from exercise 5.