

Task: Control Statements II

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Introduction

Overview:

In the previous task you learned about controlling statements that made a program choose between two or more given conditions. In this task you will learn about the for loop: a mechanism that provides the tools to repeat the same thing over and over until a certain condition is met. Please read the instructions below for more information.

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Instructions

- Open the Control_II.sln file in the folder Control_II and read its contents. Make sure you read all of the comments and try your best to understand them.
- You may run the project to see the output. The instructions on how to do this are inside the file. Feel free to write and run your own example code before doing the tasks to become more comfortable with C#.
- Instructions on how to complete your compulsory tasks are below.

Compulsory Task 1

Follow these steps:

NOTE: Make a copy of this folder on your computer. Submit the required files when you are done.

Before you go any further, Open the *Example Programs* folder in your *Task* folder. Have a look at the two example programs written for you, run them by hitting F5 when opened. Look at the output of each program and compare it to the code written within the *Program.cs* file in the Project of *Task 4* - the comments are there to help you.

Create a new Project called *fizzBuzz* in your *Task* folder:

- Your program must print all the numbers from 1 to 100 in each line:
 - If the number is a multiple of 3 it must print "Fizz" in that line instead of the number;
 - If the number is a multiple of 5 it must print "Buzz" in that line instead of the number;
 - o If the number is a multiple of both 3 and 5 it must print "FizzBuzz" in that line instead of the number.

Compulsory Task 2

Follow these steps:

Create a new Project called *game* in your *Task* folder:

- Write a program that gives a user 10 chances to guess a number in the range 0 and 50.
- If they guess the number they win the game and it ends; otherwise they lose after 10 incorrect guesses.

After each guess an appropriate message is to be shown:

- "Guess higher" if the number the user guessed is lower than the random number,
- "Guess lower" if the number the user guessed is higher than the random number,
- "Correct guess you win" if the number the user guessed is equal to the random number
- "You lose" if the user fails to guess the correct number after 10 guesses.

Use the code below to generate the random number for the game (or Copy and paste the code into the Project *game*'s *Program.cs* from *Program.cs* in the Project *Control_II*, the code is in a comment at the end of the file).

```
Random r = new Random();
int catchTheNumberThatIsReturned = r.Next(50);
```

Still need help?

Just write your queries in your comments.txt file and your tutor will respond. Alternatively you can email us on help@hyperiondev.com.

Task Statistics

Last update to task: 12/02/2016.

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Task Feedback link: <u>Hyperion Development Feedback.</u>