Java: BizzBuzz Game ‘Turn Generator’:

|  |
| --- |
| **ASSIGNMENT GOALS:**   1. **Introduction to both Textbooks** 2. **Get acclimated to the Eclipse IDE: editing source and launching an executable program/application.** 3. **Introduction to Java language basics.**     1. **Structure of a simple Class**    2. **Arrays, loops, logical constructs, …**    3. **Displaying formatted output using the “printf()” method.** 4. **Expand an already-started simple program (several steps above a “hello world” level)** |

(20 Points)

1. Textbook Readings:
   1. Starting Out With Java: Quick Read of Chapter 1 (pp 1 – 21)
   2. The Pragmatic Programmer: Read Preface to 1st Edition (pp xix ~ xxii)
2. Install Java JDK and Eclipse IDE (see notes/pointers on BB Content🡪Resources)
3. Review Eclipse Tutorial – if you’re not already familiar with it:

**Eclipse: Help->welcome->Tutorials (you can exit Welcome at any time)**

1. Go through the process of compiling/running example programs/Classes reviewed during lecture – copy/paste output of the programs reviewed in class and listed below, into your IDE. Validate that they compile and run as expected.

Copy and paste the “console output” of each program below:

* 1. edu.cuny.csi.csc330.examples.HelloWorld

|  |
| --- |
| HelloWorld |

* 1. edu.cuny.csi.csc330.examples.HelloWorldPlus

|  |
| --- |
| HelloWorldPlus |

(80 Points)

1. Programming assignment :

NOTE start with Class provided under: **edu.cuny.csi.csc330.lab1**

This is a simple programming assignment designed to give you an introduction with Java’s logical constructs, arrays and formatted output.

There are varying versions of the BizzBuzz game – follow the basic rules outlined here: <https://glacier.adams12.org/sites/glacier.d7sb.adams12.org/files/users/mue001026/attachments/Buzz.pdf> (Also included in to BB Lab1 Folder).

Complete the implementation of the partially implemented Class the edu.cuny.csi.csc330.lab1 package (BizzBuzzGame.java).

**Details**

* Complete the implementation of the *goPlay()* method. Use a loop to cycle through MAX\_TURNS iterations.
* Readable, even, symmetrical formatting is important for this coding assignment. Follow through the link below to reference “printf()” method usage in Java.
* The goPlay() method will call on an implementedgenerateSpokenValue() method which returns one of the following:

|  |
| --- |
| BIZ = 6  BUZZ = 3  if current count is factor of both BIZ and BUZZ, return "BIZ-BUZZ"  if current count is factor of BUZZ, return "BUZZ"  if current count is factor of BIZ, return "BIZ"  otherwise, return the count value |

<https://www.cs.colostate.edu/~cs160/.Summer16/resources/Java_printf_method_quick_reference.pdf> (also posted to BB Content🡪Resources).

**What to submit:**

1. Java source code file (start with *BizzBuzzGame.java* file under edu.cuny.csi.csc330.lab1 package).
2. This Word document with your program output pasted below.

PASTE YOUR OUTPUT HERE

|  |
| --- |
| Richard 1  John 2  Cynthia BIZZ  Paul 4  Jane 5  George BIZZ-BUZZ  Patti 7  Olivia 8  Brian BIZZ  Maureen 10  Richard 11  John BIZZ-BUZZ  Cynthia 13  Paul 14  Jane BIZZ  George 16  Patti 17  Olivia BIZZ-BUZZ  Brian 19  Maureen 20  Richard BIZZ  John 22  Cynthia 23  Paul BIZZ-BUZZ  Jane 25  George 26  Patti BIZZ  Olivia 28  Brian 29  Maureen BIZZ-BUZZ  Richard 31  John 32  Cynthia BIZZ  Paul 34  Jane 35  George BIZZ-BUZZ  Patti 37  Olivia 38  Brian BIZZ  Maureen 40  Richard 41  John BIZZ-BUZZ  Cynthia 43  Paul 44  Jane BIZZ  George 46  Patti 47  Olivia BIZZ-BUZZ  Brian 49  Maureen 50 |

Output should look [very] similar to this:

|  |
| --- |
| Richard 1  John 2  Cynthia BIZZ  Paul 4  Jane 5  George BIZZ-BUZZ  Patti 7  Olivia 8  Brian BIZZ  Maureen 10  Richard 11  John BIZZ-BUZZ  Cynthia 13  Paul 14  Jane BIZZ  George 16  Patti 17  Olivia BIZZ-BUZZ  Brian 19  Maureen 20  Richard BIZZ  John 22  Cynthia 23  Paul BIZZ-BUZZ  Jane 25  George 26  Patti BIZZ  Olivia 28  Brian 29  Maureen BIZZ-BUZZ  Richard 31  John 32  Cynthia BIZZ  Paul 34  Jane 35  George BIZZ-BUZZ  Patti 37  Olivia 38  Brian BIZZ  Maureen 40  Richard 41  John BIZZ-BUZZ  Cynthia 43  Paul 44  Jane BIZZ  George 46  Patti 47  Olivia BIZZ-BUZZ  Brian 49  Maureen 50 |