Define a method which returns Collatz sequence for a given input value.

*Note: To get a Collatz sequence from a number, if it's even, divide it by two, and if it's odd, multiply it by three and add one. Continue the operation on the result of the previous operation until the number becomes 1.*

Write the method with the following specifications

Name of method : ***getCollatzSequence(int num)*** // which accepts an integer value as argument and return a string.

Arguments: one argument of type integer

Return Type: string

**Specifications:** The value returned by the method getCollatzSequence() is determined by the following rules

If the given value is 5, return a string of Collatz Sequence as 5 16 8 4 2 1

If the given value is negative, return "Error"

**Note**

At each stage you must add the numbers to the output string and form the output as shown above.

The numbers in the output string must be separated by a space as shown above.

The output must include the given number and 1.

If the number does not converge to 1 in 100 tries the return the String "Does not Converge".

**Read the steps below carefully before you start**

* + 1. Download the skeleton code provided ***(***[***ECC\_41\_CollatzSequence.java***](http://scoremore.talentsprint.com/asset-v1:CodeCraft+Tech-01+2016+type@asset+block/ECC_41_CollatzSequence.java)***)***
    2. In the downloaded file, add your code in the placeholder - "ADD YOUR CODE HERE"
    3. To write code, you can use editors such as Eclipse, Notepad, GEdit, VIM etc
    4. Compile your code
    5. Check the output and upload the source file i.e., .java file

**Follow the below steps to upload the file**

1. click on ‘Select a file' button. Locate and select the .java file ([***ECC\_41\_CollatzSequence.java***](http://scoremore.talentsprint.com/asset-v1:CodeCraft+Tech-01+2016+type@asset+block/ECC_41_CollatzSequence.java)) you want to upload. Ensure that you select the correct file as only one file can be uploaded. In case you selected the wrong file, refresh the page before proceeding to next step.
2. Now the button ‘Upload ECC\_41\_CollatzSequence.java’ will be displayed. Click this button to upload

**Click on the file name to download the template:** [***ECC\_41\_CollatzSequence.java***](http://scoremore.talentsprint.com/asset-v1:CodeCraft+Tech-01+2016+type@asset+block/ECC_41_CollatzSequence.java)

[STAFF DEBUG INFO](http://scoremore.talentsprint.com/courses/course-v1:CodeCraft+Tech-01+2016/courseware/4f01ff95e06e46428673f3970f91dfb6/3ddc845aede440198bb2abd4c80c9beb/#6a94f60cde964df8a7f610674145a3db_debug)

No file has been uploaded.

Note: If you have accidentally selected the wrong file, refresh the page. This will allow you to select again.

Upload your assignment