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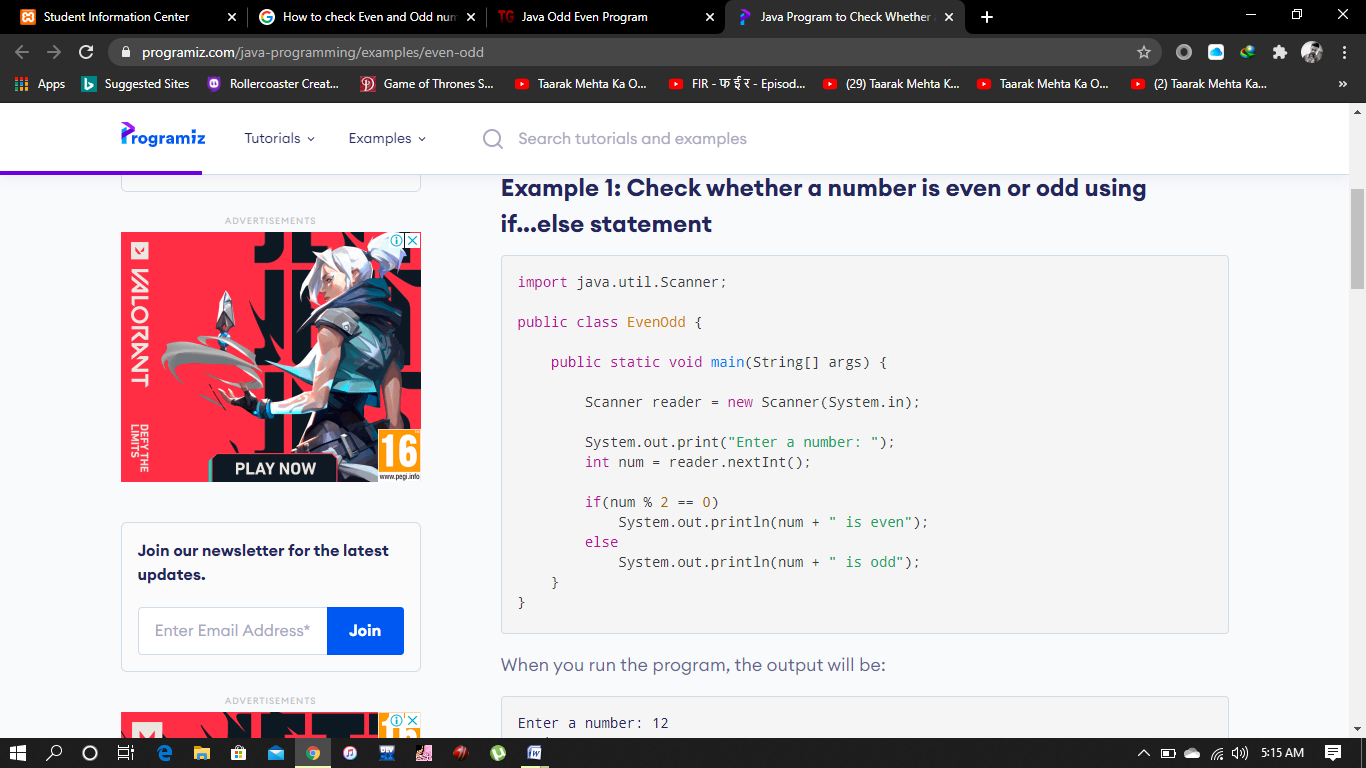
**University: IQRA National University Peshawar**

**Name:** Muhammad Junaid

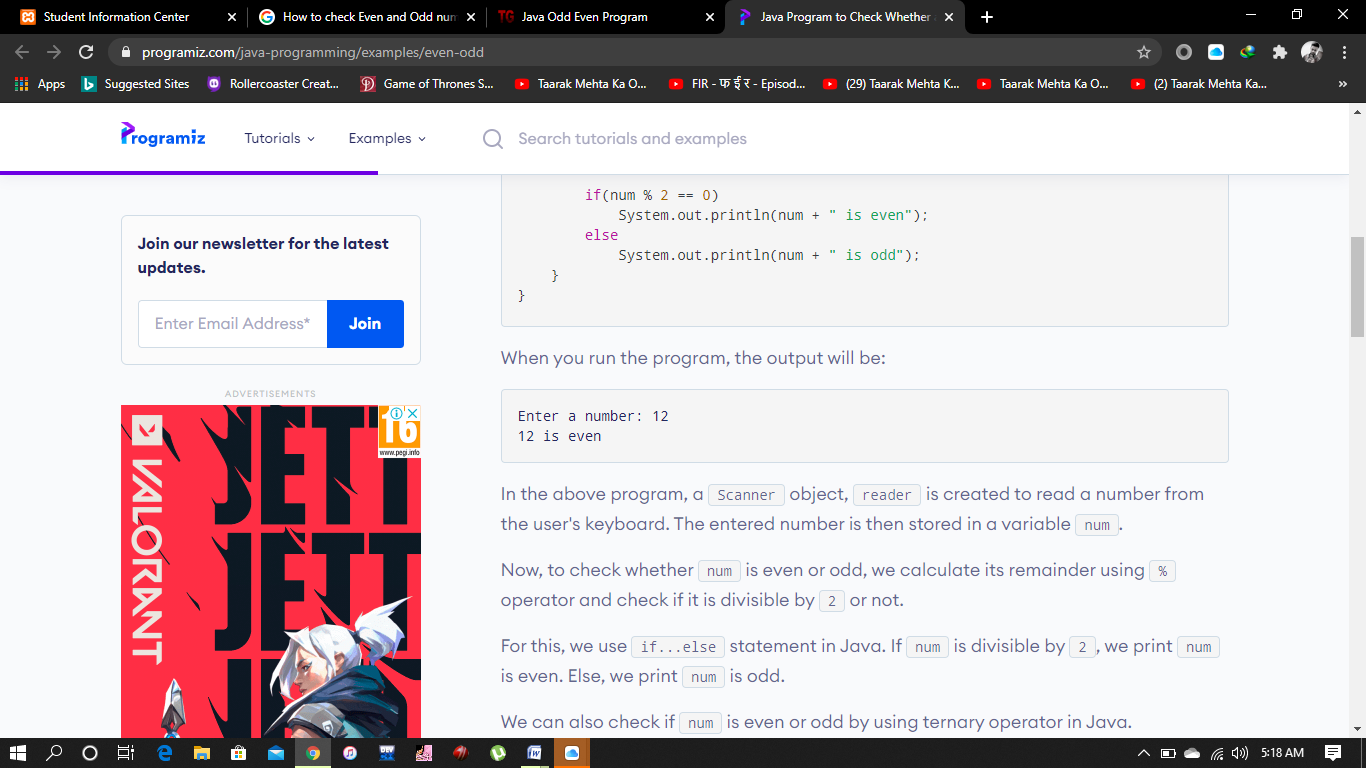
**ID:** 16027

**Teacher:** Sir Ayyub

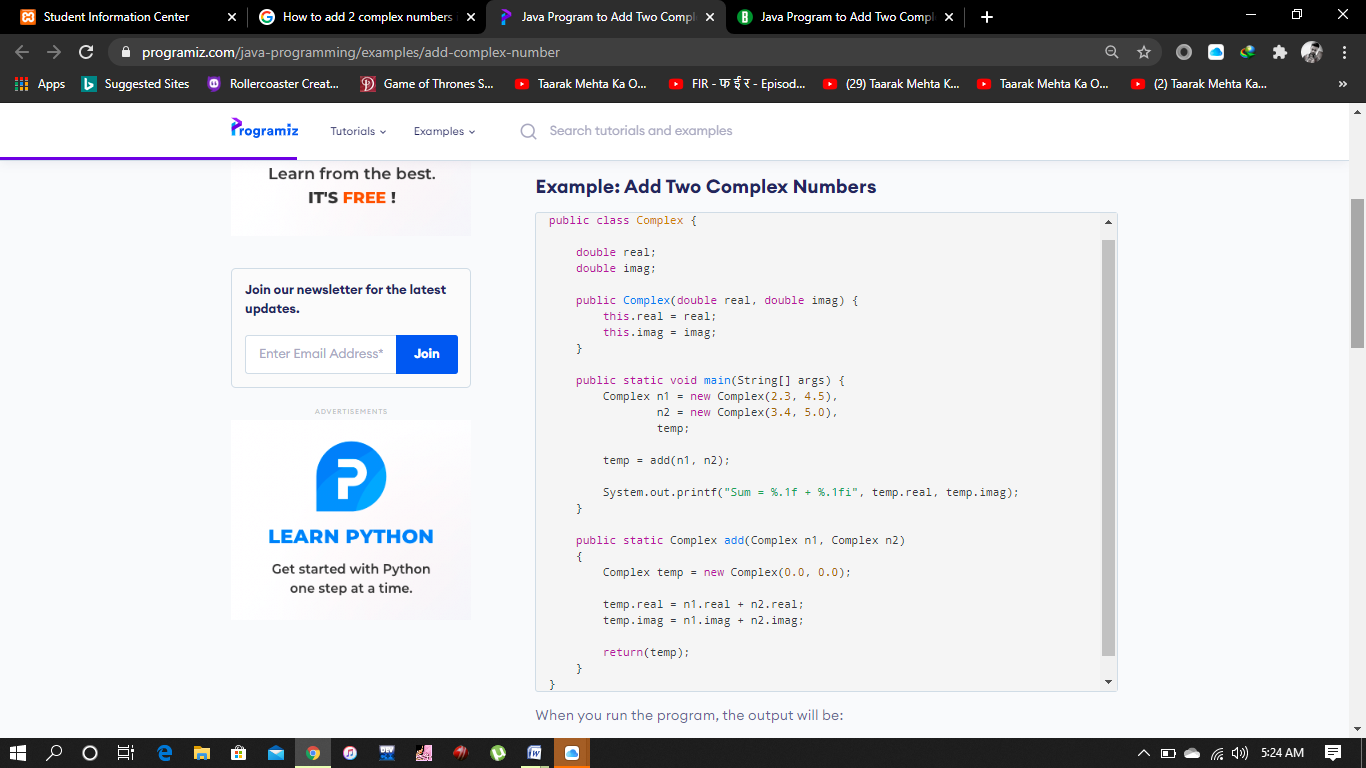
**Subject:** Object Oriented Programming (Lab)

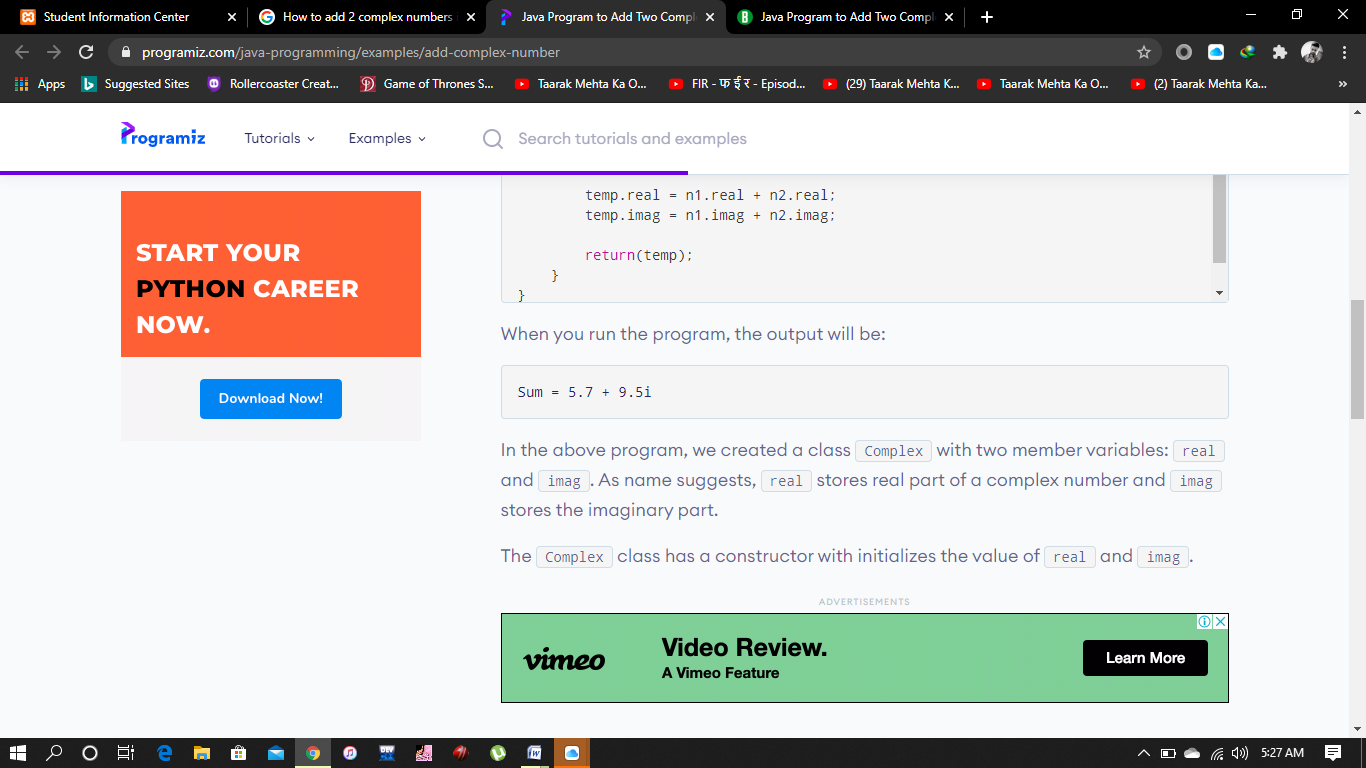
Q1. How to check Even and Odd numbers in java using object oriented approach?

**ANSWER:**

**OUTPUT:**

Q2. How to add 2 complex numbers in java using object oriented approach?

**ANSWER:**



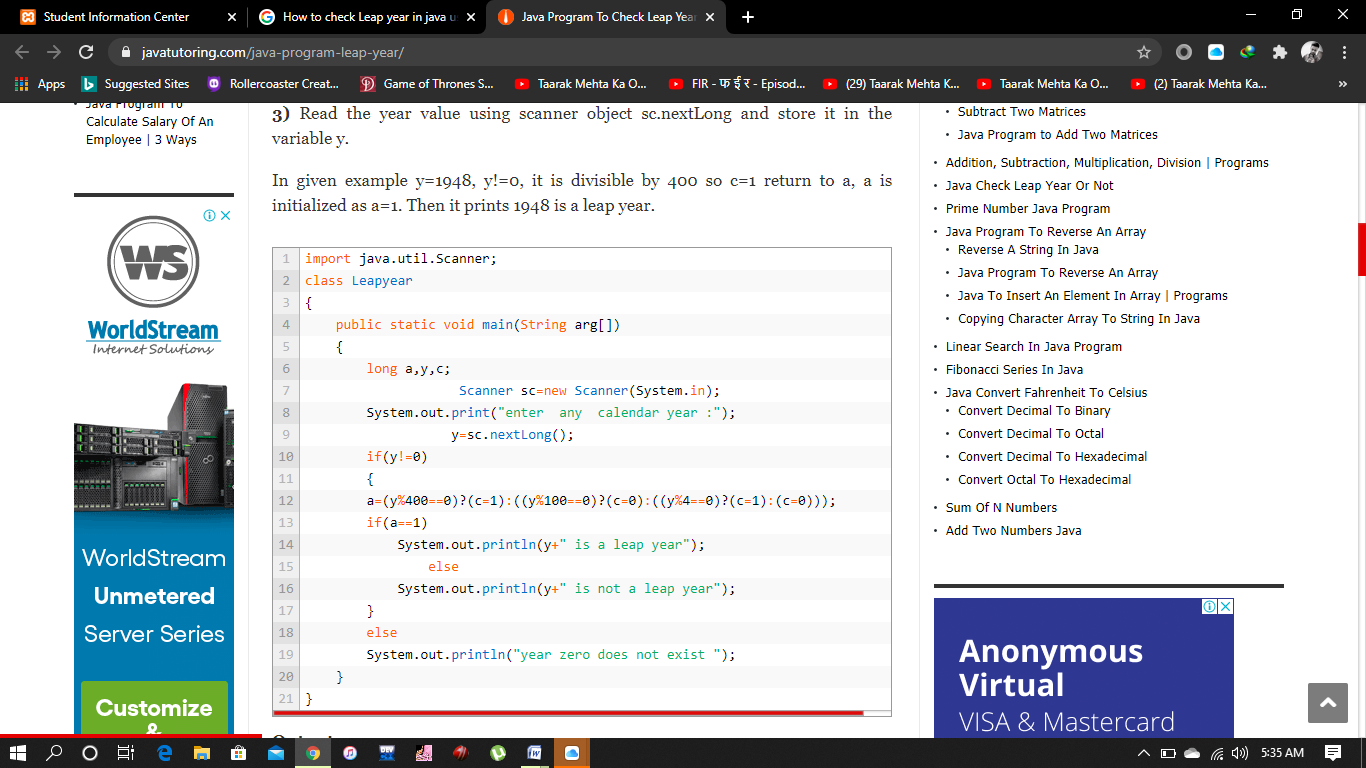
**OUTPUT:**

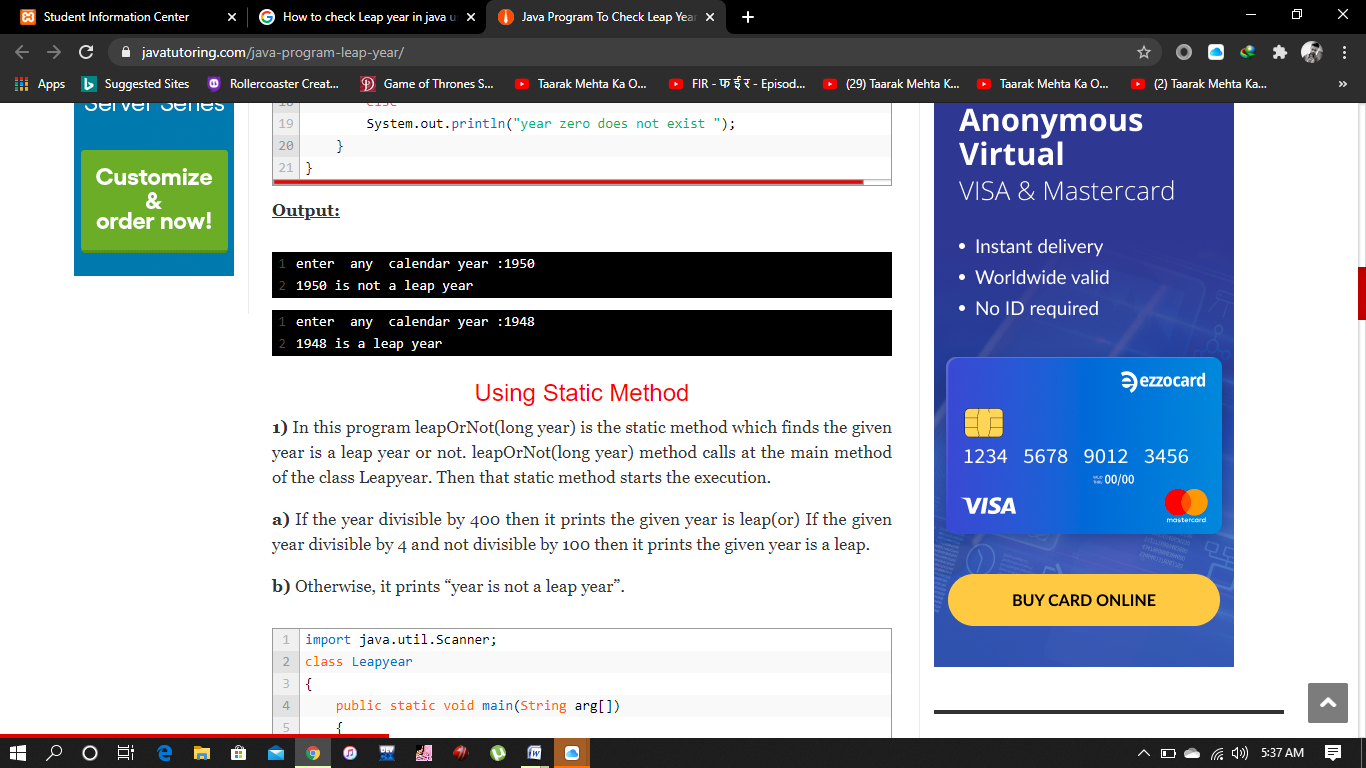
**EXPLANATION:**

We created a class **Complex** with two member variables: **real** and **imag.** As name suggests, **real** stores real part of a complex number and **imag** stores the imaginary part.

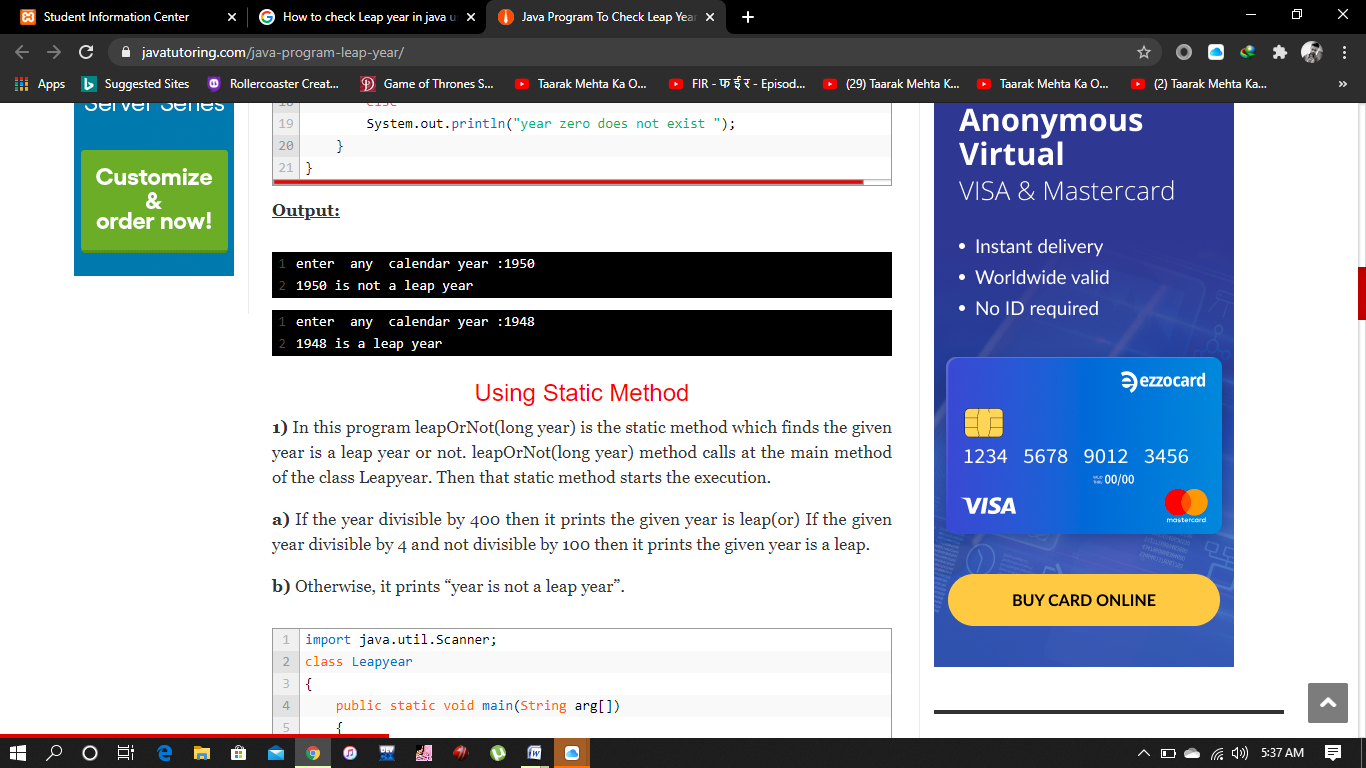
The Complex class has a constructor with initializes the value of **real** and **imag.**

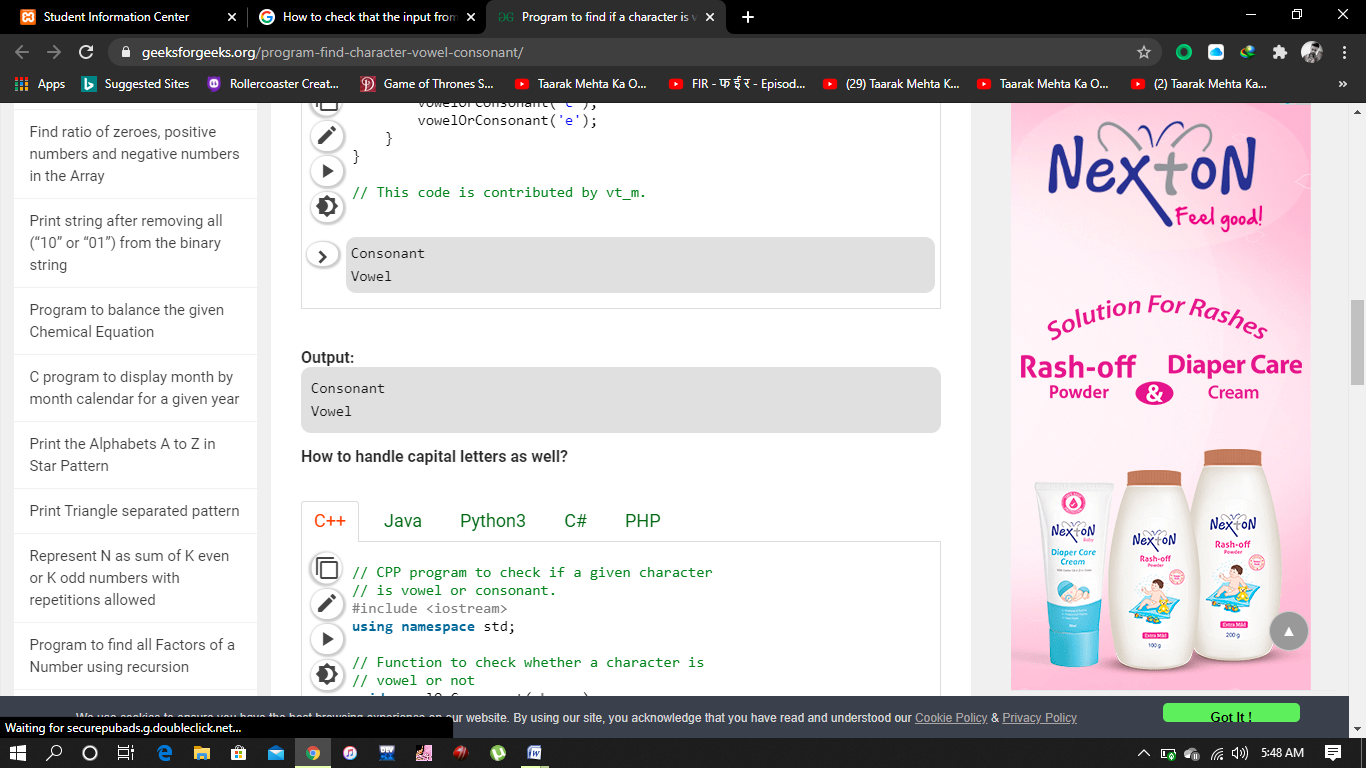
Q3. How to check Leap year in java using object oriented approach?

**ANSWER:**

**OUTPUT:**

Q4. How to check that the input from the user is the vowel or not in java using object oriented approach?

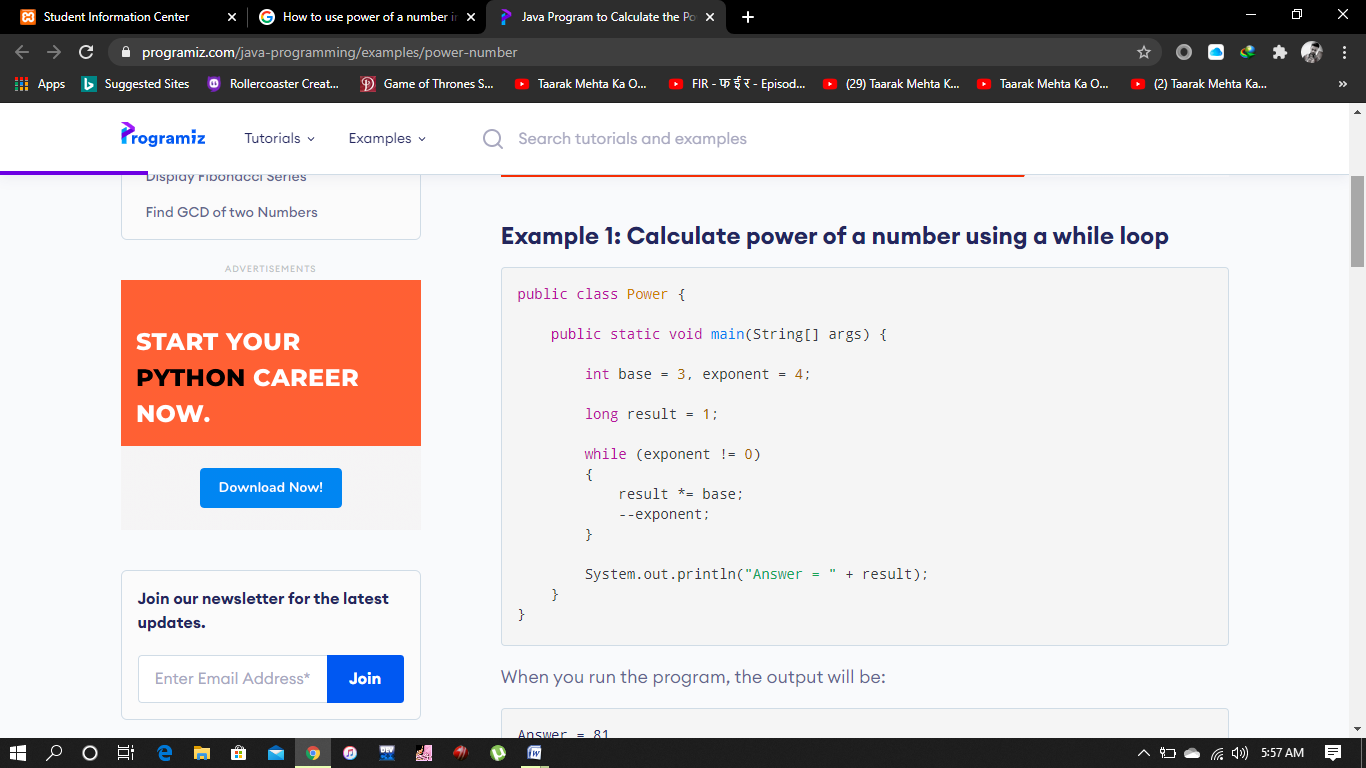
**ANSWER:**

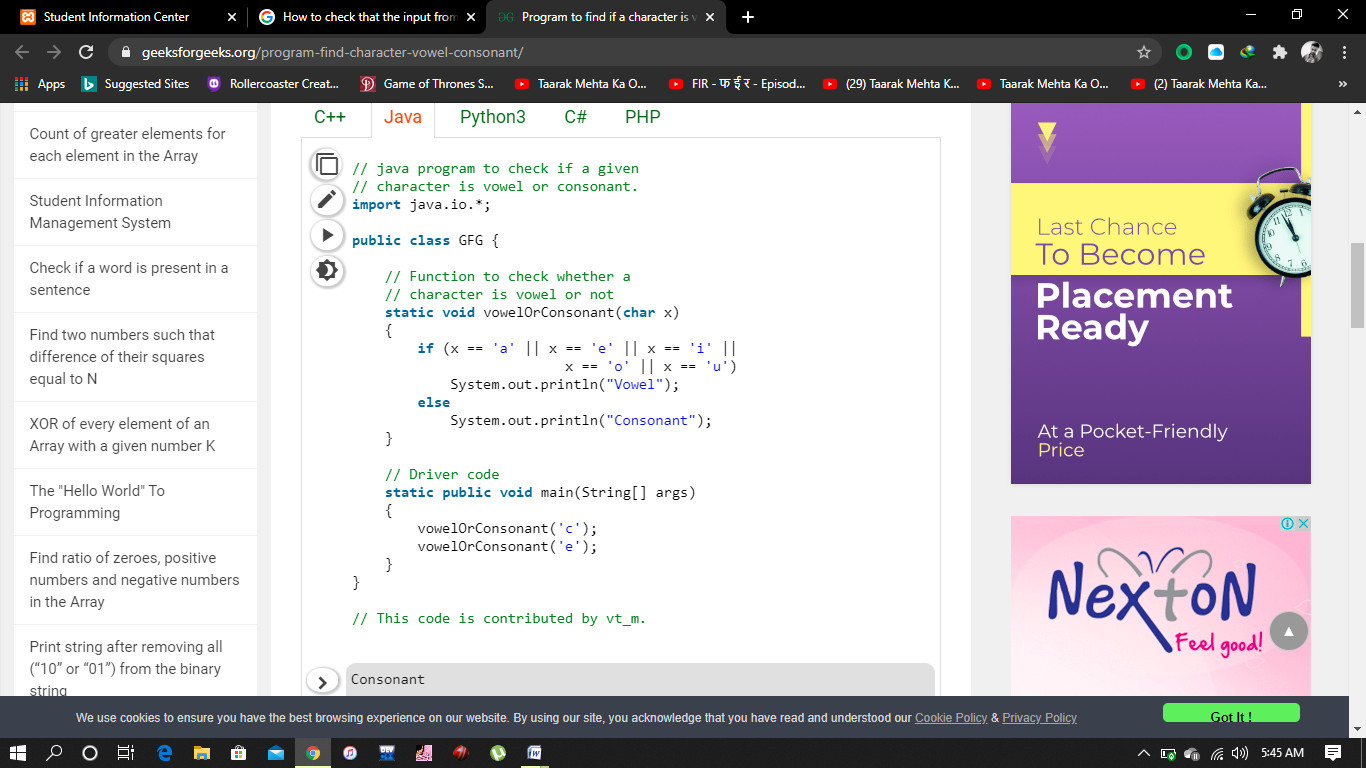
**OUTPUT:**

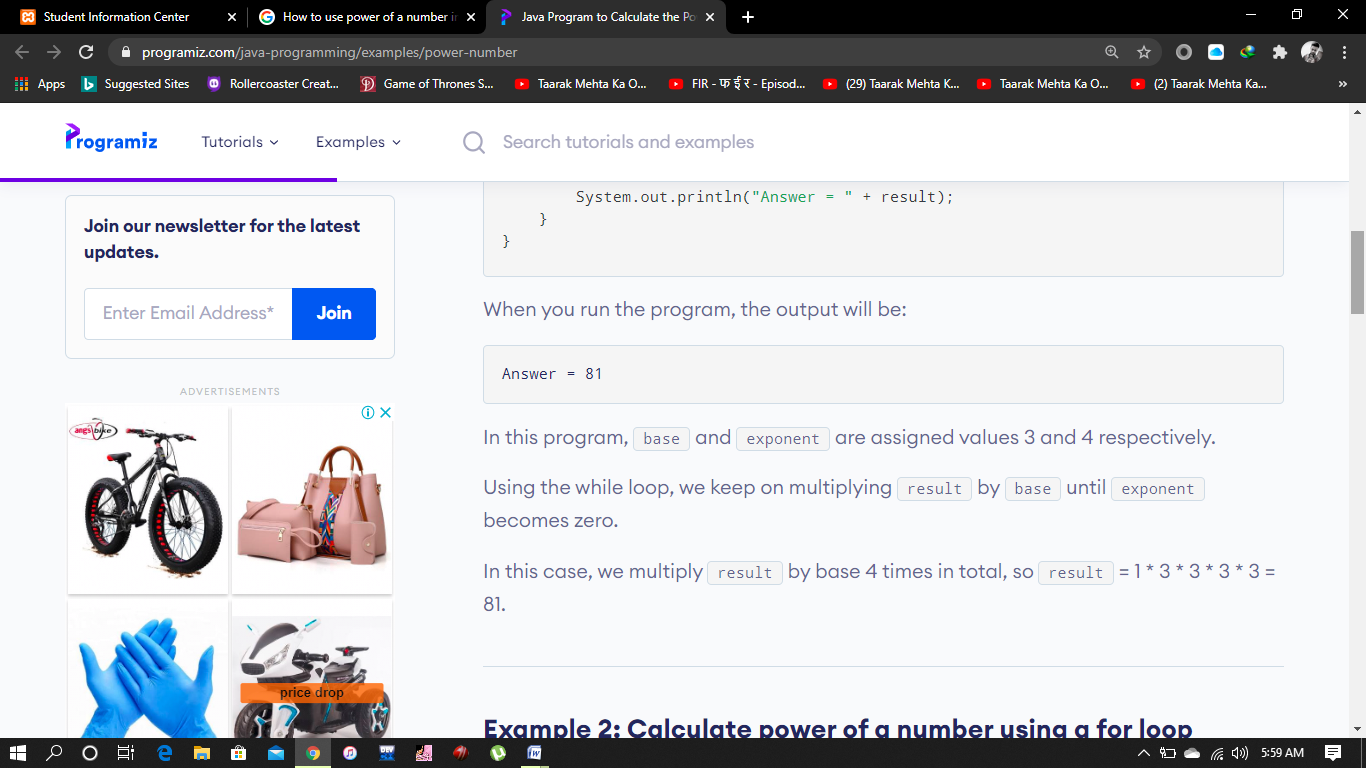
Q5. How to use power of a number in java using object oriented approach?

**ANSWER:**

***Power of a number using a while loop:***



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**OUTPUT:**

**EXPLANATION:**

In this program, base and exponent are assigned values 3 and 4 respectively.

Using the while loop, we keep on multiplying result by base until exponent becomes zero.

In this case, we multiply result by base 4 times in total, so result = **1 \* 3 \* 3 \* 3 \* 3 = 81.**