API Activity

CSC 142 Java API Exercise

Answer these questions by looking things up in the Java API.    The Java API contains all the documentation for the classes provided with the Java language. There is a link to the API from our class website.

Feel free to discuss answers on the forum. However, please avoid one student posting all the answers.  Only post a couple, giving other students a chance to post their answers.

Given the declaration **String s = “letterhead”;** and using the String class

1. Write the expression to find index of the character ‘**h’.**
2. Write the expression to retrieve the character ‘**r’** from the String.
3. Write the expression to get the substring “**ette**”.
4. Write the expression to find the index location of the last **'e'**.

Using the Math class

1. Write the expression to calculate e1.7
2. Write the expression to find the larger of two values **x** and **y**
3. Write the expression to generate a random number in the range **[0.0, 1.0)**
4. Write the expression to generate a random number in the range **[0.0, 20.0)** (hint: this won’t be a new method, but will require some math after you make the call).
5. Write the expression to generate a random number in the range **[5.0, 6.0)** (same hint as before).
6. Write the expression to generate a random number in the range **[10.0, 15.0)** (think about combining the 2 steps from 4 and 5).
7. Write the expression to generate a random integer in the range **[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]**

More searching through the API

1. Write a statement to instantiate a Point object with coordinates (3, 4) and binding it to an appropriate reference variable.
2. What package do you need to import to use a Point object?
3. What are the coordinates of a Point object if you don't specify any? (0,0)

public static void lab02() {

        /\*

        1.  Write the expression to find index of the character ‘h’.

        2.  Write the expression to retrieve the character ‘r’ from the String.

        3.  Write the expression to get the substring “ette”.

        4.  Write the expression to find the index location of the last 'e'.

        \*/

        String s = "letterhead";

        System.out.println(s.indexOf("h"));

        System.out.println(s.charAt(5));

        System.out.println(s.substring(1,5));

        System.out.println(s.lastIndexOf("e"));

        /\*

        1.  Write the expression to calculate e1.7

        2.  Write the expression to find the larger of two values x and y

        3.  Write the expression to generate a random number in the range [0.0, 1.0)

        4.  Write the expression to generate a random number in the range [0.0, 20.0) (hint: this won’t be a new method, but will require some math after you make the call).

        5.  Write the expression to generate a random number in the range [5.0, 6.0) (same hint as before).

        6.  Write the expression to generate a random number in the range [10.0, 15.0) (think about combining the 2 steps from 4 and 5).

        7.  Write the expression to generate a random integer in the range [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

        \*/

        System.out.println(Math.exp(1.7));

        int x = 1;

        int y = 2;

        System.out.println(Math.max(x,y));

        System.out.println(Math.random());

        System.out.println(Math.random() \* 20);

        System.out.println(Math.random() + 5);

        System.out.println((Math.random() \* 10) + 4);

        System.out.println((int)(Math.random() \* 10) + 1);

        //1.    Write a statement to instantiate a Point object with coordinates (3, 4) and binding it to an appropriate reference variable.

        Point p = new Point(3,4);

        //2.    What package do you need to import to use a Point object?

        import java.awt.\*;

        //3.    What are the coordinates of a Point object if you don't specify any? (0,0)

        It will not have any coordinates if Point(). It will have [x=0,y=0] if Point(0,0)

    }