**EasyJavaAssignment - Strings**

1. Write a Java program to get the character at the given index within the String.

Sample Output:

Original String = Java Exercises!

The character at position 0 is J

The character at position 10 is i

2. Write a Java program to compare two strings lexicographically. Two strings are lexicographically equal if they are the same length and contain the same number of characters in the same positions.

Sample Output:

String 1: This is Exercise 1

String 2: This is Exercise 2

"This is Exercise 1" is less than "This is Exercise 2"

3. Write a Java program to check whether a given string ends with the contents of another string.

Sample Output:

"Python Exercises" ends with "se"? false

"Python Exercise" ends with "se"? true

4. Write a Java program to get the index of all the characters of the alphabet.

Sample Output:

a b c d e f g h i j

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36 10 7 40 2 16 42 1 6 20

k l m n o p q r s t

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8 35 22 14 12 23 4 11 24 31

u v w x y z

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5 27 13 18 38 37

Sample string of all alphabet: "The quick brown fox jumps over the lazy dog."

5. Write a Java program to replace each substring of a given string that matches the given regular expression with the given replacement.

Sample string : "The quick brown fox jumps over the lazy dog."

In the above string replace all the fox with cat.

Sample Output:

Original string: The quick brown fox jumps over the lazy dog.

New String: The quick brown cat jumps over the lazy dog.

6. Write a Java program to convert all the characters in a string to uppercase.

Sample Output:

Original String: The Quick BroWn FoX!

String in uppercase: THE QUICK BROWN FOX!

7. Write a Java program to reverse a string.

Sample Output:

The given string is: The quick brown fox jumps

The string in reverse order is:

spmuj xof nworb kciuq ehT

**EasyJavaAssignment - Interfaces**

1. Start by making a normal Java-7-style application with these features:

• An interface called RegularPolygon with two abstract methods: getNumSides and getSideLength

• A class EquilateralTriangle that implements the interface, has getNumSides return 3 and getSideLength return an instance variable that is set by the constructor.

• A class Square that implements the interface, has getNumSides return 4 and getSideLength return an instance variable that is set by the constructor.

2. Add a static totalSides method, that given a RegularPolygon[], returns the sum of the number of sides of all the elements.

3. Add two default methods: • getPerimeter (n \* length, where n is the number of sides) • getInteriorAngle ( (n-2)π/n in radians)