**Programming Exercise using Strings with Java**

**Part A. Using Strings and String methods.**

Modify the source code presented in class for searching String arrays,

1. Change the elements of the books[] array to have six of your favorite books as the array’s elements.
2. Change the parameters of the methods arrayname[i].endsWith, arrayname[i].startsWith, and arrayname[i].indexOf to reflect the titles of your books
3. Place your source code and a snapshot of your output below.

**Part B. Using the Stringbuilder Class (check out week 5 lecture notes part 2 for code hints and starter code below)**

Create a Java program that will…

1. Create a String array with the following elements: Lion, Tiger, Bear, Zebra, Elephant, Gorilla, Rhinoceros, then display the array
2. Append a new element: Hyena
3. Replace Gorilla with Chimpanzee, then display the modified array
4. Delete the element Zebra, then display the modified array
5. Sort the Array and then display the sorted array [

hint: use the Arrays.sort(arrayname) method.

Arrays.sort(Animals);

For (String Animal:Animals)

System.out.println("The sorted int array is:" + Animal));

1. Reverse the order of the array and then display the elements of the reverse array

Starter Code

//program to demo StringBuilder

**public** **class** ArrayAnimals

{

**public** **static** **void** main(String[] args)

{

StringBuilder sb = **new** StringBuilder();

String Animals[] = {"Lion","Tiger","Bear","Zebra" ,"Elephant","Gorilla","Rhinoceros"};

**for**(**int** i =0; i<Animals.length;i++)

sb.append(Animals[i]);

sb.append("Hyena");

System.***out***.println(sb);

//delete Zebra..Find start and end position of Zebra

sb.delete(13,18);

//display the String;

System.***out***.println(sb);

}

}