Lab Exercises

Lab Exercise

- Split a string represent an IP address:
  - Use string split("\\.")
  - Use StringTokenizer
  - The program, for example: your Input
    - 163.121.12.30
    - The result is :

      163

      121

      12

      30

```
public class IPCutter {

    String cmdLine;

    public IPCutter(String cmdLine) {...3 lines }
    int[] doIPSplit() {...17 lines }
```

```
public class Lecture_Demo {

    public static void main(String[] args) {

        String commandLine="163.121.12.30";
        IPCutter cut=new IPCutter( cmdLine:commandLine);
        System.out.println("The output of "+ commandLine+ " is");

        int[] out=cut.doIPSplit();

        for(int i=0;i<out.length;i++)
            System.out.println(out[i]);
```

Lab Exercise

- Given a sentence and a word, your task is that to count the number of occurrences of the given word in the string and print the number of occurrence of the word.

  - Perform the above task using only methods of the String class (2 ways).

Lab Exercise

- Develop an application that extracts the minimum and maximum of the elements of an array of 1000 element and compute the search running time.

- Develop an application to implement the binary search algorithm and compute the search running time.
- Hint: Use System.**currentTimeMillis()** or System.**nanoTime** ().

```
public class ArrayAlgorithms {

    public int max(int[] array) {...14 lines }

    public int min(int[] array) {...12 lines }

}
```

```
public class ArrayMain {

    public static void main(String[] args) {
        int[] myArray = {23, 92, 56, 39, 93,80,123,152,70,60,90,5,88,66,77,33};
        ArrayAlgorithms m = new ArrayAlgorithms();
        System.out.println("Maximum value in the array is::" + m.max( array:myArray))
        System.out.println("Minimum value in the array is::" + m.min( array:myArray))
    }

}
```