

## Java Program to find the largest and smallest word in a string (input with in the program)

```
packagefriday;
publicclassSmallestLargestWord{
publicstaticvoid main(String[] args){
    String string = "Hardships often prepare ordinary people for an extraordinary
destiny";
    String word = "", small = "", large="";
    String[] words = new String[100];
    intlength = 0;

    //Add extra space after string to get the last word in the given string
    string = string + " ";

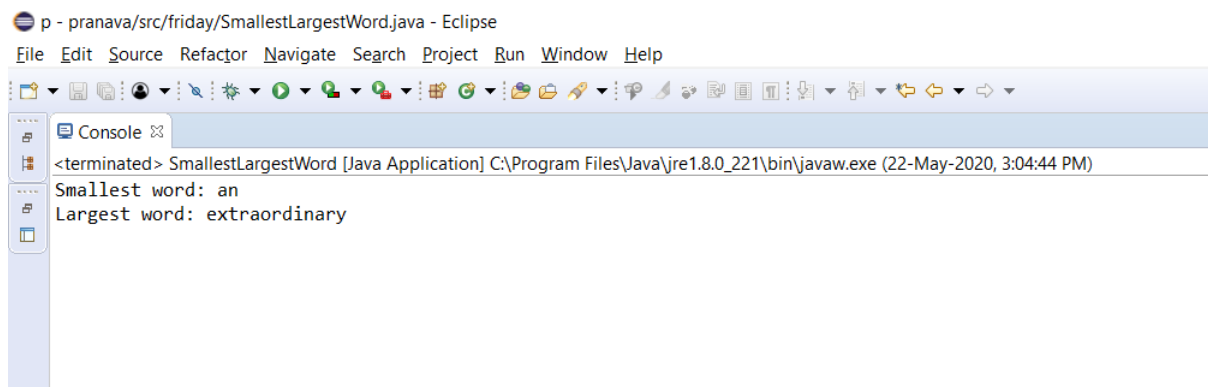
    for(inti = 0; i<string.length(); i++){
        //Split the string into words
        if(string.charAt(i) != ' '){
            word = word + string.charAt(i);
        }
        else{
            //Add word to array words
            words[length] = word;
            //Increment length
            length++;
            //Make word an empty string
            word = "";
        }
    }
    //Initialize small and large with first word in the string
    small = large = words[0];

    //Determine smallest and largest word in the string
    for(intk = 0; k<length; k++){

        //If length of small is greater than any word present in the string
        //Store value of word into small
        if(small.length() >words[k].length())
            small = words[k];

        //If length of large is less than any word present in the string
        //Store value of word into large
        if(large.length() <words[k].length())
            large = words[k];
    }
    System.out.println("Smallest word: " + small);
    System.out.println("Largest word: " + large);
} }
```

## OUTPUT



The screenshot shows the Eclipse IDE interface. The title bar indicates the file path: p - pranava/src/friday/SmallestLargestWord.java - Eclipse. The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations, running, and debugging. The Console window is open, showing the output of the program: <terminated> SmallestLargestWord [Java Application] C:\Program Files\Java\jre1.8.0\_221\bin\javaw.exe (22-May-2020, 3:04:44 PM). Below this, the output is displayed: Smallest word: an and Largest word: extraordinary.

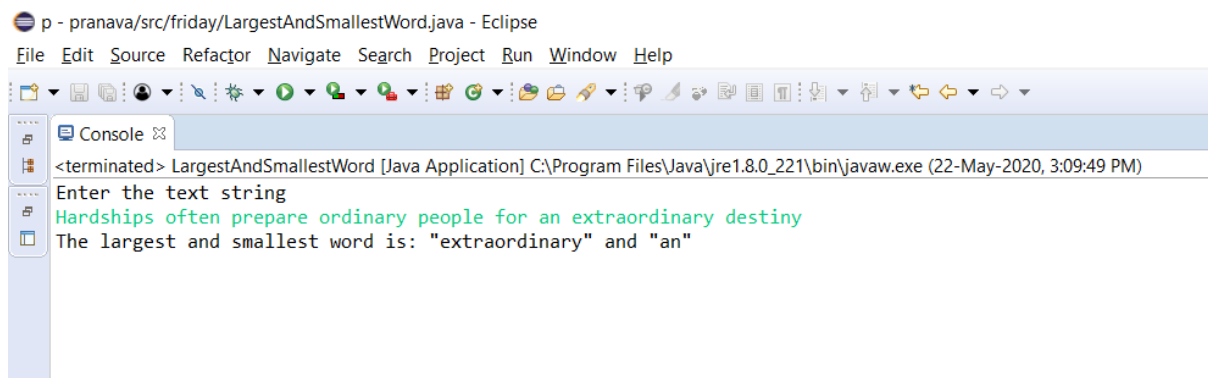
## Java Program to find the largest and smallest word in a string(input from the keyboard)

```
package friday;
import java.io.BufferedReader;
import java.io.InputStreamReader;

public class LargestAndSmallestWord {
    // Method to split the string and find the largest and smallest word
    static void printLargestAndSmallestWord(String str){
        String[] arr=str.split(" ");
        int i=0;
        int maxlength,minlength;
        maxlength=Integer.MIN_VALUE;
        minlength=Integer.MAX_VALUE;
        String largest,smallest;
        largest = smallest = "";
        for(i=0;i<arr.length;i++){
            if(arr[i].length() < minlength){
                smallest=arr[i];
                minlength=arr[i].length();
            }
            if(arr[i].length() > maxlength) {
                largest=arr[i];
                maxlength=arr[i].length();
            }
        }
        System.out.println("The largest and smallest word is: \"" + largest +
            "\" and \"" + smallest + "\"");
    }
    // Main function to read the string
    public static void main(String[] args) {
        BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
        System.out.println("Enter the text string");
        String str;

        try{
            str=br.readLine();
        }
        catch(Exception e){
            System.out.println("Error reading input");
            return;
        }
        printLargestAndSmallestWord(str);
    }
}
```

## OUTPUT



The screenshot shows the Eclipse IDE interface. The title bar indicates the file path: p - pranava/src/friday/LargestAndSmallestWord.java - Eclipse. The menu bar includes File, Edit, Source, Refactor, Navigate, Search, Project, Run, Window, and Help. The toolbar contains various icons for file operations and development tools. The Console window is active, displaying the following output:

```
<terminated> LargestAndSmallestWord [Java Application] C:\Program Files\Java\jre1.8.0_221\bin\javaw.exe (22-May-2020, 3:09:49 PM)
Enter the text string
Hardships often prepare ordinary people for an extraordinary destiny
The largest and smallest word is: "extraordinary" and "an"
```