write a java Program to print smallest and biggest possible palindrome word in a given string

```
import java.util.*;
public class SmallestBiggestPalindrome
{
   //isPalindrome() checks whether a string is palindrome or not
   public static boolean isPalindrome(String a){
      boolean flag = true;
      //Iterate the string forward and backward and compare one character at a time
      //till middle of the string is reached
      for(int i = 0; i < a.length()/2; i++){
         if(a.charAt(i) != a.charAt(a.length()-i-1)){
            flag = false;
            break;
         }
      }
      return flag;
   }

   public static void main(String[] args){
      Scanner sc=new Scanner(System.in);
      String string = sc.nextLine();
      String word = "", smallPalin = "", bigPalin="";
      String[] words = new String[100];
      int temp = 0, count = 0;
```

```
//Converts the given string into lowercase
string = string.toLowerCase();

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

for(int i = 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[temp] = word;
      //Increment temp
      temp++;
      //Make word an empty string
      word = "";
   }
}

//Determine the smallest and biggest palindromes in a given string
for(int i = 0; i< temp; i++){
   if(isPalindrome(words[i])){
```

```
        count++;
        //When first palindromic word is found
        if(count == 1)
           //Initialize smallPalin and bigPalin with first palindromic word
           smallPalin = bigPalin = words[i];

        //Compare smallPalin and bigPalin with each palindromic words
        else{
           //If length of smallPalin is greater than next palindromic word
           //Store that word in smallPalin
           if(smallPalin.length() > words[i].length())
              smallPalin = words[i];

           //If length of bigPalin is less than next palindromic word
           //Store that word in bigPalin
           if(bigPalin.length() < words[i].length())
              bigPalin = words[i];
        }
     }
  }

if(count == 0)
   System.out.println("No palindrome is present in the given string");
else{
   System.out.println("Smallest palindromic word: " + smallPalin);
```

```
            System.out.println("Biggest palindromic word: " + bigPalin);

        }

    }

}
```