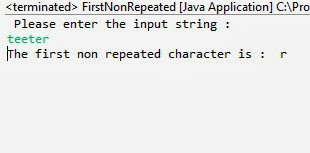
Find The First Non Repeated Character In A String : Technical Interview Question

In written exams or in [technical interview  of Amazon](http://javahungry.blogspot.com/2013/06/top-25-most-frequently-asked-core-java.html), you can easily find this question . So in order to help you for the [preparation of interview](http://javahungry.blogspot.com/2013/09/core-java-coding-programming-questions-answers-technical-interview-java.html) , we are answering this question in this post .  
  
First we need to understand the question , we need to write an algorithm for  the first non repeated character in a string , for example :  
  
***Read Also :***   [Count number of words in the String](http://javahungry.blogspot.com/2013/06/count-number-of-words-in-string-example-java-program-code.html)   
  
If the word **"stress" is input**then it should print  **'t'** **as output .**  
If the word **"teeter" is input**then it should print  **'r'** **as output .**  
  
Now , we should understand the pseudo algorithm or logic to achieve this task , code is given in the end of this post .  
  
**Logic**  
  
As we know a non repeated character occurs only once in the string , so if we store the number of times  
each alphabet appears in the string , it would help us identifying which characters are non repeated characters in the string .So we need to scan the whole string and determine the final counts of each character . Now scan the final values of each character in the string , the first character in the string with final count 1 is the first non repeated character in the string.  
  
**Pseudo Algorithm**  
  
1.   First create the  character count hash table .  
    
          For each character  
            If there is no value stored in the character   
                     set it to 1 .  
            else   
                     increment the value of the character by 1 .  
  
2.  Scan the string  
           For each character  
           return character if the count in hash table is 1 .  
           If no character have count 1 , return null   
  
***Read Also :***   [Count total number of times each alphabet appears in the String](http://javahungry.blogspot.com/2013/10/count-total-number-of-times-each-alphabet-appears-in-the-string.html) 

[](http://4.bp.blogspot.com/-BREHaLA9-vc/UrskrpofagI/AAAAAAAAAIU/_hZvH1jq78k/s1600/First+non+repeated+chracter+in+string.jpg)

***Code :***

**import** **java.util.HashMap**;

**import** **java.util.Scanner**;

**public** **class** **FirstNonRepeated** {

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

{

// TODO Auto-generated method stub

System.out.println(" Please enter the input string :" );

Scanner in = **new** Scanner (System.in);

String s=in.nextLine();

**char** c=firstNonRepeatedCharacter(s);

System.out.println("The first non repeated character is : " + c);

}

**public** **static** Character **firstNonRepeatedCharacter**(String str)

{

HashMap<Character,Integer> characterhashtable=

**new** HashMap<Character ,Integer>();

**int** i,length ;

Character c ;

length= str.length(); // Scan string and build hash table

**for** (i=**0**;i < length;i++)

{

c=str.charAt(i);

**if**(characterhashtable.containsKey(c))

{

// increment count corresponding to c

characterhashtable.put( c , characterhashtable.get(c) +**1** );

}

**else**

{

characterhashtable.put( c , **1** ) ;

}

}

// Search characterhashtable in in order of string str

**for** (i =**0** ; i < length ; i++ )

{

c= str.charAt(i);

**if**( characterhashtable.get(c) == **1** )

**return** c;

}

**return** **null** ;

}

}