

| King Saud University<br>College of Computer and Information Sciences<br>Computer Science Department |                             |
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| CSC 111<br>Introduction to Programming with Java  | First Semester<br>1440-1441 |

### self-checked sheet : String and loop

1- Write a Java program to print after removing duplicates from a given string.

#### Example

The given string is: abcdc

After removing duplicates characters the new string is: abcd

algorithm :

start

read string

loop every character in string

if character doesn't appear in another index in the string

add character to new string

print new string

end

hint:

what method can tell you if a character occur in a string or not

```

Scanner input = new Scanner(System.in);
int i, j, count = 0;
System.out.println("Enter a string: ");
String str = input.nextLine();
boolean unique = true;

for (i = 0; i < str.length(); i++) {
    unique = false;
    for (j = i + 1; j < str.length(); j++) {
        if (str.charAt(i) == str.charAt(j)) {
            unique = true;
            break;
        }
    }
    if (!unique) {
        System.out.print(str.charAt(i));
    }
}

```

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2- Write a Java program to find first non repeating character in a string.

Example

The given string is: aaabbbbnnnnuuuuuissssddd

The first non repeated character in String is: i

```

Scanner input = new Scanner(System.in);
int i,j;
System.out.println("Enter a string: ");
String str = "aaaaaaaaaiuuuu"; //input.nextLine();
for( i = 0; i < str.length(); i++){
    boolean repet = true;
    for ( j = 0; j < str.length(); j++){
        if(i!=j && str.charAt(i)==str.charAt(j)){
            repet = false;
        }
    }
    if (repet){
        System.out.print(str.charAt(i));
        break;
    }
}

```

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3- Write a Java program to reverse a string

Example

The given string is: The quick brown fox jumps

The string in reverse order is:

spmuj xof nworb kciug ehT

algorithm :

start

read string

loop every character in string from the end of the string

add character to new string

print new string

end

hint: how is this loop updated ?

```
import java.util.Scanner;

public class java_practice{
    public static void main(String args[]){
        Scanner input = new Scanner(System.in);
        int i,j;
        System.out.println("Enter a string: ");
        String str = input.nextLine();
        for (j = str.length()-1; j >= 0; j--) {
            System.out.print(str.charAt(j));
        }
    }
}
```