IRC_Java_D8_Java String_CE_COD

Test Summary

- No. of Sections: 1
- No. of Questions: 5
- Total Duration: 120 min

Section 1 - coding question

Section Summary

- No. of Questions: 5
- Duration: 120 min

Additional Instructions:

None

Q1. Write a program to check whether the given string is a palindrome.

Input Format

Input to get a string S.

Output Format

Output prints whether the string is palindrome or not.

Sample Input

```
mom
```

Sample Output

```
mom :palindrome
```

Sample Input

```
norms
```

Sample Output

```
norms :not a palindrome
```

Sample Input

```
butitwaslateonthatday
```

Sample Output

```
butitwaslateonthatday :not a palindrome
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q2. Write a program to count the vowels in the string.

Input Format

First line to get the input string S.

Output Format

Displays the number of vowels

Constraints

S > 0

Sample Input

```
string
```

Sample Output

```
1
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q3. Write a program to check whether the string is lexicographically equal to another string

Input Format

Input to get two strings.

Output Format

Display the output as shown in the sample output.
Note :

- if (string1 > string2) it returns a positive value(difference between the characters)
- if both the strings are equal lexicographically i.e.(string1 == string2) it returns 0.
- if (string1 < string2) it returns a negative value((difference between the characters)

Sample Input

```
harry
harry
```

Sample Output

```
0
```

Sample Input

```
john
mini
```

Sample Output

```
-3
```

Sample Input

```
tiger
lion
```

Sample Output

```
8
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q4. Write a program to remove consecutive vowels from a string.

Input Format

Input to get a string.

Output Format

the output displays the string after removing consecutive vowels from it.

Sample Input

```
cool
```

Sample Output

```
col
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Q5. Write a program to validate domain names of the email address. The fair organizers have listed the accepted domains as "com", "in", "net", and "org". Write a program to validate email addresses that have the above listed domain names.
Create a driver class called Main. In the Main method, obtain the inputs from the console and validate the email address.

Input Format

Input consist of the email address

Output Format

Output prints the email address and in next line whether the email address is valid or not.
Refer sample input and output for formatting specifications.

Sample Input

```
ram@gmail.com
```

Sample Output

```
ram@gmail.com
Valid email address
```

Sample Input

```
ram@gmail.biz
```

Sample Output

```
ram@gmail.biz
Invalid email address
```

Time Limit: - ms Memory Limit: - kb Code Size: - kb

Answer Key & Solution

Section 1 - coding question

Q1

Test Case

Input

```
noon
```

Output

```
noon :palindrome
```

Weightage - 20

Input

```
morn
```

Output

```
morn :not a palindrome
```

Weightage - 20

Input

```
butteritwasbutterlove
```

Output

```
butteritwasbutterlove :not a palindrome
```

Weightage - 30

Input

```
kik
```

Output

```
kik :palindrome
```

Weightage - 10

Input

```
late
```

Output

```
late :not a palindrome
```

Weightage - 10

Input

```
madam
```

Output

```
madam :palindrome
```

Weightage - 10

Sample Input

```
mom
```

Sample Output

```
mom :palindrome
```

Sample Input

```
norms
```

Sample Output

```
norms  :not  a  palindrome
```

Sample Input

```
butitwaslateonthatday
```

Sample Output

```
butitwaslateonthatday  :not  a  palindrome
```

Solution

```
import java.util.*;
import java.util.Scanner;
class Main
{
   public static void main(String args[])
   {
      String str, reverse = "";
      Scanner in = new Scanner(System.in);

      str = in.nextLine();

      int length = str.length();
      for (int i = length - 1; i >= 0; i--)
         reverse = reverse + str.charAt(i);
     if (str.equals(reverse))
         System.out.println(str+" :palindrome");
      else
         System.out.println(str+" :not a palindrome");
}
}
```

Q2

Test Case

Input

```
lemon
```

Output

```
2
```

Weightage - 20

Input

```
follow
```

Output

```
2
```

Weightage - 20

Input

```
member
```

Output

```
2
```

Weightage - 20

Input

```
tree
```

Output

```
2
```

Weightage - 20

Input

```
yellow
```

Output

```
2
```

Weightage - 20

Sample Input

```
string
```

Sample Output

```
1
```

Solution

```
import java.util.Scanner;
class Vow{
  public static void main(String[] args)
    {
        Scanner in = new Scanner(System.in);
        String str = in.nextLine();

        System.out.print(count_Vowels(str));
    }
 public static int count_Vowels(String str)
    {
        int count = 0;
        for (int i = 0; i < str.length(); i++)
        {
            if (str.charAt(i) == 'a' || str.charAt(i) == 'e' || str.charAt(i) == 'i'
                    || str.charAt(i) == 'o' || str.charAt(i) == 'u')
            {
                count++;
            }
        }
        return count;
    }
}
```

Q3

Test Case

Input

```
nisha
priya
```

Output

```
-2
```

Weightage - 20

Input

```
richard
roy
```

Output

```
-6
```

Weightage - 20

Input

```
solo
minion
```

Output

```
6
```

Weightage - 20

Input

```
alloy
metal
```

Output

```
-12
```

Weightage - 20

Input

```
unique
talent
```

Output

```
1
```

Weightage - 20

Sample Input

```
harry
harry
```

Sample Output

```
0
```

Sample Input

```
john
mini
```

Sample Output

```
-3
```

Sample Input

```
tiger
lion
```

Sample Output

```
8
```

Solution

```
import java.util.Scanner;
class Main{
 public static void main(String args[]) {
     Scanner in=new Scanner(System.in);
      String str1,str2;
```

```
        str1=in.nextLine();
        str2=in.nextLine();
        int result = str1.compareTo( str2 );
        System.out.println(result);
    }
}
```

Q4

Test Case

Input

```
follow
```

Output

```
follow
```

Weightage - 20

Input

```
redeem
```

Output

```
redem
```

Weightage - 20

Input

```
moon
```

Output

```
mon
```

Weightage - 20

Input

```
next
```

Output

```
next
```

Weightage - 20

Input

```
piicture
```

Output

```
picture
```

Weightage - 20

Sample Input

```
cool
```

Sample Output

```
col
```

Solution

```
import java.util.Scanner;
class Main
{
    static boolean is_vow(char c)
    {
        return (c == 'a') || (c == 'e') ||
               (c == 'i') || (c == 'o') ||
               (c == 'u');
    }
    static void removeVowels(String str)
    {
        System.out.print(str.charAt(0));
           for (int i = 1;i < str.length(); i++)
            if ((!is_vow(str.charAt(i - 1))) ||
                (!is_vow(str.charAt(i))))
                System.out.print(str.charAt(i));
    }
    public static void main(String[] args)
    {
        String str;
        Scanner in=new Scanner(System.in);
        str=in.nextLine();
        removeVowels(str);
     }
}
```

Q5

Test Case

Input

```
ram@gmail.com
```

Output

```
ram@gmail.com
Valid email address
```

Weightage - 20

Input

```
ram@gmail.biz
```

Output

```
ram@gmail.biz
Invalid email address
```

Weightage - 20

Input

```
rayon@yahoo.net
```

Output

```
rayon@yahoo.net
Valid email address
```

Weightage - 20

Input

```
morsh@hotmail.in
```

Output

```
morsh@hotmail.in
Valid email address
```

Weightage - 20

Input

```
stephen@yahoo.us
```

Output

```
stephen@yahoo.us
Invalid email address
```

Weightage - 20

Sample Input

```
ram@gmail.com
```

Sample Output

```
ram@gmail.com
Valid email address
```

Sample Input

```
ram@gmail.biz
```

Sample Output

```
ram@gmail.biz
Invalid email address
```

Solution

```
import java.io.*;
import java.util.*;
class Main {
public static void main(String [] args) {
    Scanner sc = new Scanner(System.in);
    String email = sc.nextLine();
    System.out.println(email);
    if(email.contains("com") || email.contains("in") || email.contains("net") || email.contains("org")) {
        System.out.println("Valid email address");
    }
    else {
        System.out.println("Invalid email address");
    }
}
}
```