Java intro Assignment
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Q1. Write a program to replace a substring inside a string with other string ?
Q2. Write a program to find the number of occurrences of the duplicate words in a string and print them ?
Q3. Write a program to find the number of occurrences of a character in a string without using loop?
Q4. Calculate the number & Percentage Of Lowercase Letters,Uppercase Letters, Digits And Other Special Characters In A String
Q5. Find common elements between two arrays.
Q6. There is an array with every element repeated twice except one. Find that element
Q7. Write a program to print your Firstname,LastName & age using static block,static method & static variable respectively
Q8. Write a program to reverse a string and remove character from index 4 to index 9 from the reversed string using String Buffer
Q9.Write a program to display values of enums using a constructor & getPrice() method (Example display house & their prices)
Q10.Write a single program for following operation using overloading
A) Adding 2 integer number
B) Adding 2 double
C) multiplying 2 float
D) multiplying 2 int
E) concate 2 string
F) Concate 3 String
Q11.Create 3 sub class of bank SBI,BOI,ICICI all 4 should have method called getDetails which provide there specific details like rateofinterest etc,print details of every banks.

//common Array

```
package com.company;
public class CommonArray {
    public static void getCommonArray(int[] array1,int[] array2){
        for(int i=0;i<array1.length;i++) {
            for (int j = 0; j < array2.length; j++) {
                if (array1[i] == array2[j]) {
                    System.out.println(array1[i]);
                }
            }
        }
        }
        public static void main(String[] arg){
            int[] arr1 = {4,7,3,6,2};
            int[] arr2 = {3,2,12,9,5,44,5};
            getCommonArray(arr1,arr2);
    }
}
```

//Duplicate Occurance

```
package com.company;
public class DuplicateOccurance {
    public static void main(String[] args)
        {
            String input="hello its me hello me";     //Input String
            String[] words=input.split(" ");   //Split the word from String
            int wrc=1;                    //Variable for getting Repeated word count
            for(int i=0;i<words.length;i++)       //Outer loop for Comparison
            {
                for(int j=i+1;j<words.length;j++)  //Inner loop for Comparison
                {
                    if(words[i].equals(words[j]))  //Checking for both strings are
equal
                    {
                        wrc=wrc+1;          //if equal increment the count
                        words[j]="0";        //Replace repeated words by zero
                    }
                }
                if(words[i]!="0")
                    if(wrc>1) {
                        System.out.println(words[i] + "--" + wrc);    //Printing the
word along with count
                        wrc = 1;
                    }
            }
        }
    }
```

//Enum

```
package com.company;
enum house{
    H_1BHK(900),H_2BHK(2),H_3BHK(50),H_4BHK(15),H_5BHK(12);
   private int price;
    house(int p) {
        price = p;
    }
    int getPrice() {
        return price;
    }
}
public class Enum {
    public static void main(String args[]){
        System.out.println("All house prices:");
        for (house h : house.values()) System.out.println(
                h + " costs " + h.getPrice() + " thousand dollars.");
    }
}
```

//method over loading

```
package com.company;
public class MethodOverloading {
     public static int add(int a,int b){
          return a+b;
     }
     public static double add(double a,double b){
          return a+b;
     }
     public static float multiply(float a,float b){
          return a*b;
     }
     public static int multiply(int a,int b){
          return a*b;
     }
     public static String concat(String str1,String str2){
          return str1+str2;
     }
     public static String concat(String str1,String str2,String str3){
          return str1+str2+str3;
     }
     public static void main(String [] adr){
          System.out.println(add(10,20));
          System.out.println(add(10.4,30.45));
          System.out.println(multiply(10f,20f));
          System.out.println(multiply(10,20));
          System.out.println(concat("aditya","kumar"));
          System.out.println(concat("Mr","aditya","kumar"));
     }
}
```

//Bank

```
package com.company;
interface Bank{
     public void rateOfInterest();
     public void name();
     public void ifscCode();
     public void loanLimit();
}
 class SBI implements Bank{
     public void name(){
          System.out.println("Name = SBI Bank");
     }
     public void ifscCode(){
          System.out.println("IFSC:SBI00056");
     }
     public void rateOfInterest(){
          System.out.println("rate of interest= 10% per annum");
     }
     public void loanLimit(){
          System.out.println("Loan limit 10cr.");
     }
 }
class ICICI implements Bank{
     public void name(){
```

```
        System.out.println("Name = ICICI Bank");
    }
    public void ifscCode(){
        System.out.println("IFSC:ICICI00056");
    }
    public void rateOfInterest(){
        System.out.println("rate of interest= 11% per annum");
    }
    public void loanLimit(){
        System.out.println("Loan limit 40cr.");
    }
}
class BOI implements Bank{
    public void name(){
        System.out.println("Name = BOI Bank");
    }
    public void ifscCode(){
        System.out.println("IFSC:BOI00056");
    }
    public void rateOfInterest(){
        System.out.println("rate of interest= 9% per annum");
    }
    public void loanLimit(){
        System.out.println("Loan limit 20cr.");
    }
}
public class OBank {
    public static void main(String[] ad) {
        Bank sbi = new SBI();
        sbi.name();
        sbi.ifscCode();
        sbi.rateOfInterest();
        sbi.loanLimit();
        //ICICI Bank
        Bank icici = new ICICI();
        icici.name();
        icici.ifscCode();
        icici.rateOfInterest();
        icici.loanLimit();
       //BOI Bank
        Bank boi = new SBI();
        boi.name();
        boi.ifscCode();
        boi.rateOfInterest();
        boi.loanLimit();
}
}
```

//count with percentage

```
package com.company;
public class Occurance
{
    static void characterPercentage(String inputString)
    {
        //Getting total no of characters in the given string
        int totalChars = inputString.length();
        //Initializing upperCaseLetters, lowerCaseLetters, digits and others with 0
        int upperCaseLetters = 0;
        int lowerCaseLetters = 0;
        int digits = 0;
```

```
        int special= 0;
        //Iterating through each character of inputString
        for (int i = 0; i < inputString.length(); i++)
        {
            char ch = inputString.charAt(i);
            //If ch is in uppercase, then incrementing upperCaseLetters
            if(ch>='A'&&ch<='Z')
            {
                upperCaseLetters++;
            }
            //If ch is in lowercase, then incrementing lowerCaseLetters
            else if(ch>='a'&&ch<='z')
            {
                lowerCaseLetters++;
            }
            //If ch is a digit, then incrementing digits
            else if (ch>=48 && ch<=57)
            {
                digits++;
            }
            //If ch is a special character then incrementing others
            else
            {
                special++;
            }
        }
        //Calculating percentage of uppercase letters, lowercase letters, digits and
other characters
        double upperCaseLetterPercentage = (upperCaseLetters * 100.0) / totalChars ;
        double lowerCaseLetterPercentage = (lowerCaseLetters * 100.0) / totalChars;
        double digitsPercentage = (digits * 100.0) / totalChars;
        double otherCharPercentage = (special * 100.0) / totalChars;
        //Printing percentage of uppercase letters, lowercase letters, digits and other
characters
        System.out.println("In '"+inputString+"' : ");
        System.out.println("Uppercase letters are "+upperCaseLetters+"and
%="+upperCaseLetterPercentage+"%");
        System.out.println("Lowercase letters are "+lowerCaseLetters+"and
%="+lowerCaseLetterPercentage+"%");
        System.out.println("Digits Are "+digits+"and %="+digitsPercentage);
        System.out.println("Other Characters Are "+special+" and
%="+otherCharPercentage+"%");
        System.out.println("-----------------------------");
    }
    public static void main(String[] args)
    {
        characterPercentage("My email id is aditya.kumar1@tothenew.com");
    }
}
```

// occurance without loop

```
package com.company;
public class OccuranceWithoutLoop {
        public static void main(String[] args) {
            String str = "This is an Example Of The Character";
            System.out.println("Length Of String:" + str.length());
            System.out.println("Length Of String Without a :" + str.replace("a",
"").length());
            int charcount = str.length() - str.replaceAll("a", "").length();
```

```
            System.out.println("Occurrence Of A Char In String: " + charcount);
        }
    }
```

// Remove_Reverse_String

```
package com.company;
public class Remove_Reverse_String {
    public static void remove_String(String str){
        int len=str.length();
        char[] ch=new char[len];
        int j=0;
        for(int i=len-1;i>=0;i--){
        ch[j]=str.charAt(i);
        j++;
        }
        String str1=new String(ch);
        System.out.println(str1);
        StringBuffer sb=new StringBuffer(str1);
        sb.delete(4,9);
        System.out.println(sb);
    }
public static void main(String[] ag){
        remove_String("adityafdfdf");
}
}
```

// static operation

```
package com.company;
public class StaticOperation {
    static String firstName="aditya";
    static String lastName="kumar";
    static int age=10;
  static{
        System.out.println(firstName);
        System.out.println(lastName);
        System.out.println(age);
    }
    public static void show(){
        System.out.println(firstName);
        System.out.println(lastName);
        System.out.println(age);
    }
public static void main(String[] ag){
        show();
}
}
```

// String Replace Substring

```
package com.company;
class StringReplaceSubstring {
    public static void stringReplaceSubString(String substr1,String substr2){
        String str="aditya";
        char[] ch=str.toCharArray();
        int j=0;
        for(int i=0;i<str.length();i++){
            System.out.println(ch[i]);
```

```
            if(ch[i]==substr1.charAt(j)){
                ch[i]=substr2.charAt(j);
                j++;
            }
        }
        String newString=new String(ch);
    }
}
    public class StringReplace {
        public static void main(String[] af) {
            String str = "Hello World";
            System.out.println(str.replace('H', 'W'));
            System.out.println(str.replaceFirst("He", "Wa"));
            System.out.println(str.replaceAll("He", "Ha"));
             StringReplaceSubstring.stringReplaceSubString("adi","raj");
        }
    }
```

// twice exception one

```
package com.company;
class TwiceExceptionOne
{
    static int findSingle(int ar[], int ar_size)
    {
        // Do XOR of all elements and return
        int res = ar[0];
        for (int i = 1; i < ar_size; i++)
            res = res ^ ar[i];
        return res;
    }
    public static void main (String[] args)
    {
        int ar[] = {2, 3, 5, 4, 5, 3, 4};
        int n = ar.length;
        System.out.println("Element occurring once is " +
                findSingle(ar, n) + " ");
    }
}
```