ArrayOps

```
public class ArrayOps
{
  public static void main(String[] args)
  {
  }
  public static int findMissingInt (int [] array) {
     for (int i=0;i<array.length+1;i++)//checking all the number from 0 to length
     {
        boolean ifexsist=true;//assume that the number is not exsist
       for(int j=0;j<array.length;j++)</pre>
       {
          if(i==array[j])//check if the number exsist
          {
             ifexsist=false;
             break;//braeking from the loop beacuse the number exsist
          }
       }
       if(ifexsist)//check if the number exsist
          return i;
     }
     return -1;
  }
  public static int secondMaxValue(int [] array)
  {
     int indexofgrater = 0;
```

```
int maxarry = array[0];//detrer the max
     int secondmax = array[0];//deter the second max
     for (int i=0;i<array.length;i++)</pre>
     {
       if(maxarry<array[i])</pre>
          indexofgrater = i;//saving the index of the max number
          maxarry=array[i];//checking what is the max
       }
       secondmax = Math.min(array[i],secondmax);//checking what is the min
to be the second max
    }
     for (int i=0;i<array.length;i++)
    {
       if(i!=indexofgrater&&array[i]>secondmax)//check if the number is
grater than the second max but not the max
          secondmax = Math.max(array[i],secondmax);
    }
     return secondmax;
  }
  public static boolean containsTheSameElements(int [] array1,int [] array2)
  {
    for(int i = 0;i<array1.length;i++)//checking if all first arry elments exsist in
the second
     {
       boolean isexsist = true://assume that the elment doesnt exsist
       for (int j=0;j<array2.length;j++)
```

```
{
     if(array1[i]==array2[j])//cheking if the elment exsist
     {
        isexsist=false;
        break;//braking from the loop cause the elment exsist
     }
  }
  if(isexsist)
     return false;
}
for(int i = 0;i<array2.length;i++)//checking the oppoist direction
{
   boolean isexsist = true;//assume that the elment doesnt exsist
  for (int j=0;j<array1.length;j++)</pre>
  {
     if(array2[i]==array1[j])//cheking if the elment exsist
     {
        isexsist=false;
        break;//braking from the loop cause the elment exsist
     }
  }
  if(isexsist)
     return false;
}
return true;
```

}

```
public static boolean isSorted(int [] array)
   {
     if(array[0]<array[1])//cheking if is increasing
     {
        for(int i=1;i<array.length;i++)</pre>
           if(array[i]<array[i-1])//if the arry isnot increasig then returning false
              return false;
        return true;
     }
      if(array[0]>array[1])//checking if the function decreasing
     {
        for(int i=1;i<array.length;i++)</pre>
           if(array[i]>array[i-1])//if one time the function is not decrease return
false
              return false;
        return true;
     }
     return false;
   }
}
```

StringOps

```
public class StringOps
{
  public static void main(String[] args)
   System.out.println(capVowelsLowRest("onE twO thrEE wOrld"));
  }
  public static String capVowelsLowRest (String s) {
     String newone="";
     char newchar ='a';
     String forcheck = "AEIOUaeiou";
    for(int i = 0; i < s.length(); i++)
       int valueofchar=s.charAt(i);//getting the value of the char
       if(forcheck.indexOf(s.charAt(i))>-1)//check if the letter is one of the
chosen one
       {
          if(64<valueofchar&&valueofchar<91)//check if the letter is Capital
            newchar = (char)(valueofchar);
          else newchar = (char)(valueofchar-32);//the letter his small one so i
will make it capital
       }
       else
       {
          if(64<valueofchar&&valueofchar<91)//check if the letter is Capital
             newchar = (char)(valueofchar+32);
          else newchar = (char)(valueofchar);//the letter his small one so i will
make it capital
```

```
}
     newone += newchar;//adding the char
  }
  return newone;
}
public static String camelCase (String s)
{
  String newone = "";
  char newchar = s.charAt(0);
  int valueofchar = s.charAt(0);
  int indexfirst = 0;
  for(int i=0;i<s.length();i++) //checking what is the first letter
  {
     if(s.charAt(i) != ' ')
     {
       valueofchar = s.charAt(i);
       newchar = s.charAt(i) ;
       if(64<valueofchar&&valueofchar<91)//check if the letter is Capital
       newchar = (char)(valueofchar+32);
       newone +=newchar;
       indexfirst = i;//saving the first index of letter
       break;
     }
  }
   for(int i=indexfirst+1;i<s.length();i++)
   {
```

```
valueofchar = s.charAt(i);
       if(s.charAt(i) != ' ')//check if this is not space
       {
          if(s.charAt(i-1) == ' ')//check if previous char was space
          {
             if(valueofchar>91)//check if it is small letter
               newchar = (char)(valueofchar -32); //making the letter to be
capital
               else newchar = (char)(valueofchar);
               newone +=newchar;//adding the char
          }
          else
          {
             if(64<valueofchar&&valueofchar<91)//check if the letter is Capital
               newchar = (char)(valueofchar+32 );
             else newchar = (char)(valueofchar);//if itsnot capital letter
             newone +=newchar;//adding the char
          }
       }
     }
     return newone;
  }
  public static int[] allIndexOf (String s, char chr) {
     int count = 0;//counting how many time the letter exsist
     for(int i=0;i<s.length();i++)
       if(s.charAt(i)==chr)//counting it
          count++;
```

```
int[] allindex = new int [count];
int indexofarrry = 0;//checking the index of the arry
for(int i=0;i<s.length();i++)//put the exsist index on the arry
    if(s.charAt(i)==chr)
    {
        allindex[indexofarrry]=i;
        indexofarrry++;
     }
    return allindex;
}</pre>
```