

1) Write a Java program to perform to find out remainder of each element in given array and display

its sum?

Input:

arr1={3,5,10,9,17};

arr2={2,6,8,4,5};

out put:

11

sol:

----

```
public class Test {
    public static void main(String[] args) {

        int arr1[]={3,5,10,9,17};
        int arr2[]={2,6,8,4,5};

        int sum=0;
        for(int i=0;i<arr1.length;i++) {
            int rem=arr1[i]%arr2[i];
            sum=sum+rem;
        }
        System.out.println(sum);
    }
}
```

2) Write a java program to display triplets of elements whose sum of equals to given number?

Input:

arr = 5 2 3 8 9 1 4 6

sum = 10

Output: 5 2 3

5 1 4

3 1 6

sol:

-----

```
public class Test {
    public static void main(String[] args) {
        int[] arr = { 5, 2, 3, 8, 9, 1, 4, 6 };
        int sum = 10;
        for(int i=0;i<arr.length-2;i++) {
            for(int j=i+1;j<arr.length-1;j++) {
                for(int k=j+1;k<arr.length;k++) {
                    if(arr[i]+arr[j]+arr[k]==sum) {
                        System.out.println(arr[i]+"
"+arr[j]+" "+arr[k]);
                    }
                }
            }
        }
    }
}
```

```
    }  
}
```

3) Write a java program to display duplicate characters from given string?

input: google

output:

o g

sol:

----

```
public class Test{  
    public static void main(String[] args) {  
        String str = "google";  
        int[] charCount = new int[256];  
  
        for (int i = 0; i < str.length(); i++) {  
            charCount[str.charAt(i)]++;  
        }  
        for (int i = 0; i < charCount.length; i++) {  
            if (charCount[i] > 1) {  
                System.out.print((char) i + " ");  
            }  
        }  
    }  
}
```

4) Write a java program to display distinct characters from given string?

input:

google

output:

g o l e

sol:

-----

```
public class Test{  
  
    public static void main(String[] args) {  
        String str = "google";  
        int[] charCount = new int[256];  
        char[] characters = str.toCharArray();  
  
        for (int i = 0; i < characters.length; i++) {  
            charCount[characters[i]]++;  
        }  
  
        for (int i = 0; i < characters.length; i++) {  
            if (charCount[characters[i]] == 1) {  
                System.out.print(characters[i] + " ");  
            }  
        }  
    }  
}
```

```

        for (int i = 0; i < characters.length; i++) {
            if (charCount[characters[i]] > 1) {
                System.out.print(characters[i] + " ");
                charCount[characters[i]] = 0;
            }
        }
    }
}

```

5) Write a java program to display given string?

input:

A1B2C3D4

output:

ABBCCDDDD

sol:

-----

```

public class Test {
    public static void main(String[] args) {
        String input = "A1B2C3D4";
        String result = generatePattern(input);
        System.out.println(result);
    }
    public static String generatePattern(String str) {
        StringBuilder result = new StringBuilder();

        for (int i = 0; i < str.length(); i += 2) {
            char letter = str.charAt(i);
            int count = Character.getNumericValue(str.charAt(i + 1));
            for (int j = 0; j < count; j++) {
                result.append(letter);
            }
        }
        return result.toString();
    }
}

```