

## JAVA TEST

### QUESTION 1

```
import java.util.*;

public class Marathon {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int dist = sc.nextInt();

        while (dist<5 || dist>8) {

            System.out.println("Sorry.Choose between 5km to 8km.");

            int a = sc.nextInt();

            dist=a;

        }
```

```
        for (int i=dist;i>=0;i--) {

            if (i<3 && i>0){

                System.out.println("Distance to run :"+i);

                System.out.println("Almost There.");

            }

            if (i==0) {

                System.out.println("Done for the day");

            }

            if (i>=3) {

                System.out.println("Distance to run :"+i);

            }

        }
```

### QUESTION 2

```
import java.util.*;

public class Profit {

    public static int sum(List<Integer> list) {
```

```

int sum1=0;
for (int i:list) {
    sum1+=i;
}
return sum1;
}

public static void main(String[] args) {
    Scanner sc = new Scanner(System.in);
    int a = sc.nextInt();
    ArrayList<Integer> arr = new ArrayList<>();
    ArrayList<Integer> arr1 = new ArrayList<>();
    for (int i=0;i<a;i++) {
        arr.add(sc.nextInt());
    }
    for (int i=0;i<a-1;i++) {
        for (int j=i+1;j<a;j++) {
            int x = sum(arr.subList(i, j));
            arr1.add(x);
        }
    }
    System.out.println(Collections.max(arr1));
}
}

```

### QUESTION 3

```

import java.util.ArrayList;
import java.util.Scanner;

public class Treasure1 {

    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
    }
}

```

```
int a = 0, b = 0, x=0, c = sc.nextInt();

ArrayList<Integer> arr = new ArrayList<>();

for (int i=0;i<c;i++) {
    arr.add(sc.nextInt());
}

for (int i=0;i<c-a;i++) {

    ArrayList<Integer> arr1 = new ArrayList<>();
    ArrayList<Integer> arr2 = new ArrayList<>();

    for (int j=i+1;j<c;j++) {
        arr1.addAll(arr.subList(i, j));
    }

    for (int k:arr) {
        if (arr1.contains(k)) {
            int z = 0;
        }
        else
            arr2.add(k);
    }

    int a1=0,a2=0;

    for (int p:arr1) {
        a1+=p;
    }

    for (int q:arr2) {
        a2+=q;
    }

    if (a1==a2) {
        x++;
    }

    a1=0;a2=0;
```

```
}  
if (x>0) {  
    System.out.println("true");  
}  
else  
    System.out.println("false");  
}  
}
```

#### QUESTION 4

```
import java.util.*;  
  
public class Jump {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        int a = sc.nextInt(),c=0,j = 0;  
        ArrayList<Integer> b = new ArrayList<>();  
        for (int i=0;i<a;i++) {  
            b.add(sc.nextInt());  
        }  
        while (j<=a) {  
            if (b.get(j)<=a-j) {  
                j+=b.get(j);  
                c++;  
            }  
        }  
        System.out.println(c);  
    }  
}
```

#### QUESTION 5

```
import java.util.*;

public class BubbleSort {

    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);

        int b = sc.nextInt();

        String a = new String();

        ArrayList<String> arr = new ArrayList<>();

        for (int i=0;i<a;i++) {

            arr.add(sc.next());

        }

        for (int i=0;i<arr.size();i++) {

            for (int j=i;j<arr.size();j++) {

                if (Integer.parseInt((arr.get(i)).charAt(0)) > Integer.parseInt(arr.get(j).charAt(0)) {

                    a=arr.get(i);

                }

            }

        }

    }

}
```