

## Day -4 Java Training

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### Pattern program:

```
*  
* *  
* * *  
  
import java.util.*;  
public class Main  
{  
    public static void main(String[] args) {  
        Scanner sc=new Scanner(System.in);  
        int a=sc.nextInt();  
        for(int i=1;i<=a;i++){  
            for(int j=1;j<=i;j++){  
                System.out.print("* ");  
            }  
            System.out.println();  
        }  
    }  
}
```

---

### Pattern Program for:

1

1 2

1 2 3

1 2 3 4

```
import java.util.*;
```

```
public class Main
```

```
{
```

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

```

Scanner in=new Scanner(System.in);

int n=in.nextInt();

for(int i=1;i<=n;i++){

    for(int j=1;j<=i;j++){

        System.out.print(j+" ");

    }

    System.out.println();

}

}

```

---

Pattern Program:

```

import java.util.*;

public class Main

{

    public static void main(String[] args) {

        Scanner in=new Scanner(System.in);

        int n=in.nextInt();

        for(int i=n;i>=1;i--){

            for(int j=1;j<=i;j++){

                System.out.print("* ");

            }

            System.out.println();

        }

    }

}

```

---

**Pattern program:**

**1**

**\$\$**

**123**

\$\$\$\$

12345

```
import java.util.*;

public class Main
{
    public static void main(String[] args) {
        Scanner in=new Scanner(System.in);
        int n=in.nextInt();
        for(int i=1;i<=n;i++){
            for(int j=1;j<=i;j++){
                if(i%2==0){
                    System.out.print("$ ");
                }
                else{
                    System.out.print(j+" ");
                }
            }
            System.out.println();
        }
    }
}
```

---

**Program:**

```
import java.util.*;

public class Main
{
    public static void main(String[] args) {
        Scanner in = new Scanner(System.in);
        int n = in.nextInt(),c=n;
        for(int i=1;i<=n;i++){
```

```

        for(int j=1;j<=i;j++){
            if(j==1){
                for(int k=1;k<c;k++){
                    System.out.print(" ");
                }
                c--;
            }
            System.out.print("*");
        }
        System.out.println();
    }
}

```

---

```

import java.util.*;

public class Main
{
    public static void main(String[] args) {
        Scanner in=new Scanner(System.in);
        int n=in.nextInt();
        for(int i=1;i<=n;i++){
            for(int j=1;j<=n-i;j++){
                System.out.print(" ");
            }
            for(int k=1;k<=i;k++){
                System.out.print("*");
            }
            System.out.println();
        }
        for(int i=n-1;i>=1;i--){

```

```
        for(int j=1;j<=n-i;j++){
            System.out.print(" ");
        }
        for(int k=1;k<=i;k++){
            System.out.print("*");
        }
        System.out.println();
    }
}
```

---

### **Pyramid pattern program:**

```
import java.util.*;
public class Main
{
    public static void main(String[] args) {
        Scanner in=new Scanner(System.in);
        int n=in.nextInt();
        for(int i=1;i<=n;i++){
            for(int j=1;j<=n-i;j++){
                System.out.print(" ");
            }
            for(int k=1;k<=(2*i-1);k++){
                System.out.print("*");
            }
            System.out.println();
        }
    }
}
```

---

## **ARRAYS:**

### **PROGRAM:**

```
import java.util.*;
```

```
public class Main
```

```
{
```

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

```
        Scanner in=new Scanner(System.in);
```

```
        int n=in.nextInt();
```

```
        int a[]=new int[n];
```

```
        for(int i=0;i<n;i++){
```

```
            a[i]=in.nextInt();
```

```
        }
```

```
        for(int i=0;i<n;i++){
```

```
            if(a[i]%2==0){
```

```
                System.out.print(a[i]+" ");
```

```
            }
```

```
        }
```

```
    }
```

```
}
```

---

```
import java.util.*;
```

```
public class Main
```

```
{
```

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

```
        Scanner in=new Scanner(System.in);
```

```
        int n=in.nextInt();
```

```
        int a[]=new int[n];
```

```
        int sum=0;
```

```
        for(int i=0;i<n;i++){
```

```
            a[i]=in.nextInt();
```

```

    }

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

        sum+=a[i];

    }

    System.out.print(sum);

}
}

```

---

### **MAXIMUM AND MINIMUM:**

```

import java.util.*;

public class Main
{

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);

        int n=sc.nextInt();

        int a[]=new int[n];

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

            a[i]=sc.nextInt();

        }

        int sum=0;

        int min=a[0],max=a[0];

        for(int i=1;i<n;i++){

            if(a[i]>max){

                max=a[i];

            }

            if(a[i]<min){

                min=a[i];

            }

        }

        System.out.println("Maximum: "+max);
    }
}

```

```
        System.out.println("Minimum: "+min);  
    }  
}
```

---