

```

1 |
2 import java.util.*;
3
4 class Multiplication{
5
6 static int number;
7
8
9 public void multiply() {
10
11     for(int i=1; i<=10;i++) {
12         System.out.println(number + " x " + i + " = "+ (number*i));
13     }
14 }
15
16 public static void main(String arg[]) {
17     Scanner c = new Scanner(System.in);
18     System.out.println("Enter the Number to find its Multiplication Table: ");
19     number=c.nextInt();
20     Multiplication obj = new Multiplication();
21     obj.multiply();
22 }
23 }

```

<terminated> Multiplication [Java Application] C:\Users\shriv\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.2.v20250131-0604\jre\bin\javaw.exe (1 Feb 2025, 8:21:46 pm – 8:21:53 pm elapsed: 0:00:07.10)  
Enter the Number to find its Multiplication Table:

```

5
5 x 1 = 5
5 x 2 = 10
5 x 3 = 15
5 x 4 = 20
5 x 5 = 25
5 x 6 = 30
5 x 7 = 35
5 x 8 = 40
5 x 9 = 45
5 x 10 = 50

```

```

1 import java.util.*;
2
3 class Series{
4
5     static int q;
6     static int a;
7     static int b;
8     static int n;
9     static int sum;
10
11     public static void main(String args[]) {
12
13         Scanner c = new Scanner(System.in);
14         System.out.println("Enter the integer input vlaues: ");
15         q = c.nextInt();
16         System.out.println("Enter the three input value: ");
17         for(int i =0;i<q;i++) {
18             a = c.nextInt();
19             b=c.nextInt();
20             n=c.nextInt();
21             sum = a;
22             for(int j =0;j<n;j++) {
23
24                 sum = sum + (int)Math.pow(2 , j)*b;
25                 System.out.println(sum + " ");
26             }
27             System.out.println();
28         }
29     }
30 }
31
32 }

```

<terminated> Series [Java Application] C:\Users\shriv.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.2.v20250131-0604\jre\bin\javaw.exe (2 Feb 2025, 4:54:17 pm – 4:54:55 pm elapsed: 0:00:38.635) [pid: 7648]

Enter the integer input vlaues:

Enter the three input value:

0  
2  
10  
2  
6  
14  
30  
62  
126  
254  
510  
1022  
2046

5  
3  
5  
8  
14  
26  
50  
98

```

1 import java.util.*;
2
3 class Primitive{
4
5     static long number;
6
7     public static void main(String args[]) {
8
9         Scanner c = new Scanner(System.in);
10        System.out.println("Enter the value: ");
11        number = c.nextInt();
12
13        try {
14            if(number >= Byte.MIN_VALUE && number <= Byte.MAX_VALUE) {
15                System.out.println("Byte");
16            }
17            if(number >= Short.MIN_VALUE && number <= Short.MAX_VALUE) {
18                System.out.println("Short");
19            }
20            if(number >= Integer.MIN_VALUE && number <= Integer.MAX_VALUE) {
21                System.out.println("Int");
22            }
23            if(number >= Long.MIN_VALUE && number <= Long.MAX_VALUE) {
24                System.out.println("Long");
25            }
26
27        }
28        catch(Exception e){
29            System.out.println(number+ " can't be fitted anywhere.");
30        }
31    }
32 }
33 }

```

<terminated> Primitive [Java Application] C:\Users\shriv\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.2.v20250131-0604\jre\bin\javaw.exe (2 Feb 2025, 5:42:41 pm – 5:42:46 pm elapsed: 0:00:04.118) [pid: 20988]

Enter the value:

5  
Byte  
Short  
Int  
Long

```

1 import java.util.*;
2 import java.util.regex.*;
3
4 class Validcheck {
5     public static void main(String[] args) {
6         Scanner scanner = new Scanner(System.in);
7         int N = scanner.nextInt();
8         scanner.nextLine();
9
10        // Consume the newline character
11
12        for (int i = 0; i < N; i++) {
13            String pattern = scanner.nextLine();
14            try {
15                Pattern.compile(pattern);
16                System.out.println("Valid");
17            } catch (PatternSyntaxException e) {
18                System.out.println("Invalid");
19            }
20        }
21    }
22 }

```

<terminated> Validcheck [Java Application] C:\Users\shriv\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86\_64\_23.0.2.v20250131-0604\jre\bin\javaw.exe (2 Feb 2025, 5:58:57 pm – 6:00:24 pm elapsed: 0:01:26.273) [pid: 17772]

```

3
([A-Z])
Valid
[AZ[a-z](a-z)
Invalid
batcatpat(nat
Invalid

```

```

/** Pattern program */

import java.util.*;

class RectanglePattern{
    static int number;

    public static void main(String args[]){

        System.out.println("Enter the number of colum to print the pattern: ");
        Scanner c = new Scanner(System.in);
        number=c.nextInt();

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

            for(int j=0;j<number;j++){

                if(i==0 || j==0 || i==number-1 || j==number-1){
                    System.out.print("*");
                }
                else{
                    System.out.print(" ");
                }
            }
            System.out.println();
        }
    }
}

```

input

```

Enter the number of colum to print the pattern:
5
*****
*   *
*   *
*   *
*****

...Program finished with exit code 0
Press ENTER to exit console.

```

```

1  /** Pattern program */
2
3  import java.util.*;
4
5  class Pyramid{
6      static int number;
7
8      public static void main(String args[]){
9
10         System.out.println("Enter the number of colum to print the pattern: ");
11         Scanner c = new Scanner(System.in);
12         number=c.nextInt();
13
14         for(int i=1;i<=number;i++){
15
16             for(int j=1;j<=i;j++){
17                 System.out.print("*");
18             }
19
20             System.out.println();
21
22         }
23     }
24 }
25
26

```



input

Enter the number of colum to print the pattern:

5

\*

\*\*

\*\*\*

\*\*\*\*

\*\*\*\*\*

\*\*\*\*\*

...Program finished with exit code 0

Press ENTER to exit console.

```

1  /** Pattern program */
2
3  import java.util.*;
4
5  class ReversePyramid{
6      static int number;
7
8      public static void main(String args[]){
9
10         System.out.println("Enter the number of column to print the pattern: ");
11         Scanner c = new Scanner(System.in);
12         number=c.nextInt();
13
14         for(int i=number;i>=1;i--){
15
16             for(int j=1;j<=i;j++){
17                 System.out.print("*");
18             }
19
20             System.out.println();
21
22         }
23     }
24 }
25
26

```

5 Class ReversePyramid

input

Enter the number of column to print the pattern:

5

```

*****
****
***
**
*

```

...Program finished with exit code 0  
Press ENTER to exit console.

```

2
3 import java.util.*;
4
5 class Main{
6     static int number;
7
8     public static void main(String args[]){
9
10        System.out.println("Enter the number of column to print the pattern: ");
11        Scanner c = new Scanner(System.in);
12        number=c.nextInt();
13
14        for (int i = 1; i <= number; i++) {
15            for (int j = 1; j < i; j++) {
16                System.out.print(" ");
17            }
18            for (int j = i; j <= number; j++) {
19                System.out.print("* ");
20            }
21
22            System.out.println();
23
24        }
25    }
26
27 }

```

input

Enter the number of column to print the pattern:

5

```

* * * * *
 * * * *
  * * *
   * *
    *

```

```

1 /** Pattern program */
2
3 import java.util.*;
4
5 class PerfectPyramid{
6     static int number;
7
8     public static void main(String args[]){
9
10        System.out.println("Enter the number of column to print the pattern: ");
11        Scanner c = new Scanner(System.in);
12        number=c.nextInt();
13
14        for(int i = 0; i < number; i++){
15
16            for (int j = number - i; j > 1; j--) {
17                System.out.print(" ");
18            }
19
20            for (int j = 0; j <= i; j++) {
21                System.out.print("* ");
22            }
23
24            System.out.println();
25
26        }

```

input

Enter the number of column to print the pattern:

5

```

 *
* *
* * *
* * * *
* * * * *

```



```

1- /** SandClock Pattern program */
2-
3- import java.util.*;
4-
5- class SandClock{
6-     static int n;
7-
8-     public static void main(String args[]){
9-
10-         System.out.println("Enter the number of column to print the pattern: ");
11-         Scanner c = new Scanner(System.in);
12-         n=c.nextInt();
13-
14-         for (int i = 1; i <= n; i++) {
15-
16-             for (int j = 1; j < i; j++) {
17-                 System.out.print(" ");
18-             }
19-
20-             for (int j = i; j <= n; j++) {
21-                 if(j==i||j==n||i==1)
22-                     System.out.print("* ");
23-                 else
24-                     System.out.print("  ");
25-             }
26-
27-             System.out.println();
28-
29-         }
30-
31-     }

```

```

32-
33-         for (int i = n - 1; i >= 1; i--) {
34-
35-             for (int j = 1; j < i; j++) {
36-                 System.out.print(" ");
37-             }
38-
39-             for (int j = i; j <= n; j++) {
40-                 if(j==i||j==n||i==1)
41-                     System.out.print("* ");
42-                 else
43-                     System.out.print("  ");
44-             }
45-
46-             System.out.println();
47-
48-         }
49-     }

```

```

16-
17-         for (int j = 1; j < i; j++) {
18-             System.out.print(" ");
19-         }
20-

```

input

Enter the number of column to print the pattern:

```

5
* * * * *
* * * * *
* * *
* *
*
* *
* *
* *
* * * *
* * * *

```

...Program finished with exit code 0

Press ENTER to exit console.

```

16-
17-         for (int j = 1; j < i; j++) {
18-             System.out.print(" ");
19-         }
20-

```

input

Enter the number of column to print the pattern:

```

5
* * * * *
* * * * *
* * *
* *
*
* *
* *
* *
* * * *
* * * *

```

...Program finished with exit code 0

Press ENTER to exit console.

```

1 2 /** Pattern program */
3
4 import java.util.*;
5
6 class Main{
7     static int number;
8
9     public static void main(String args[]){
10
11         System.out.println("Enter the number of column to print the pattern: ");
12         Scanner c = new Scanner(System.in);
13         number=c.nextInt();
14
15         for(int i=number;i>=1;i--){
16
17             for(int j=1;j<=i;j++){
18                 if(i%2==0){
19                     System.out.print("1");
20                 }
21                 else{
22                     System.out.print("0");
23                 }
24             }
25
26             System.out.println();
27         }
28     }
29 }
30
31
32

```

```

5
input
Enter the number of column to print the pattern:
5
00000
11111
000
11
0

...Program finished with exit code 0
Press ENTER to exit console.

```

```

1  /** Pattern program */
2
3
4  import java.util.*;
5
6  class Pattern{
7      static int n;
8
9      public static void main(String args[]){
10
11          System.out.println("Enter the number of column to print the pattern: ");
12          Scanner c = new Scanner(System.in);
13          n=c.nextInt();
14
15          for (int i = 1; i <= n; i++) {
16              for (int j = 1; j <= i; j++) {
17                  System.out.print(i + " ");
18              }
19              for (int k = i; k < n; k++) {
20                  System.out.print("* ");
21              }
22              System.out.println();
23          }
24      }
25  }
26

```

```

5
Enter the number of column to print the pattern:
5
1 * * * *
2 2 * * *
3 3 3 * *
4 4 4 4 *
5 5 5 5 5

...Program finished with exit code 0
Press ENTER to exit console.

```

```

1
2- /** Pattern program */
3
4- import java.util.*;
5
6- class Main{
7-     static int n;
8
9-     public static void main(String args[]){
10
11         System.out.println("Enter the number of column to print the pattern: ");
12         Scanner c = new Scanner(System.in);
13         n=c.nextInt();
14
15         for (int i = n; i >= 1; i--) {
16             for (int j = 1; j <= i; j++) {
17                 System.out.print(i + " ");
18             }
19             for (int k = i; k < n; k++) {
20                 System.out.print("* ");
21             }
22             System.out.println();
23         }
24     }
25 }
26
27

```

5

input

Enter the number of column to print the pattern:

5

```

5 5 5 5 5
4 4 4 4 *
3 3 3 * *
2 2 * * *
1 * * * *

```

...Program finished with exit code 0  
Press ENTER to exit console.

```

1  /** Pattern program */
2
3
4  import java.util.*;
5
6  class Main{
7      static int n;
8
9      public static void main(String args[]){
10
11          System.out.println("Enter the number of colum to print the pattern: ");
12          Scanner c = new Scanner(System.in);
13          n=c.nextInt();
14          for (int i = 0; i < n; i++) {
15              for (int j = 0; j < n; j++) {
16                  if (i == n / 2 || j == n / 2) {
17                      System.out.print("* ");
18                  } else {
19                      System.out.print(" ");
20                  }
21              }
22              System.out.println();
23          }
24      }
25  }
26
27
28

```

input

```

Enter the number of colum to print the pattern:
5
  *
 *
* * * * *
 *
  *

...Program finished with exit code 0
Press ENTER to exit console.

```