1. Problem Statement: Write a program to find the highest among the given 3 numbers.

```
1.1 Source Code: file name - Highest.java
   import java.util.Scanner;
   public class Highest {
         public static void main(String[] args) {
                Scanner sc=new Scanner(System.in);
                System.out.println("Provide 3 numbers to find the highest among
   them");
                /* This program is to find the highest among given 3 numbers.
                 * As this involves decision I am using if-else to find the
   highest number*/
                System.out.println("Enter Number 1- ");
                int num1 = sc.nextInt();
                System.out.println("Enter Number 2- ");
                int num2 = sc.nextInt();
                System.out.println("Enter Number 3- ");
                int num3 = sc.nextInt();
                System.out.println("Given numbers are "+num1+", "+num2+", and
   "+num3);
                if ((num1>num2)&&(num1>num3)) // here we are comparing num1 with
   num2 and num3
                       System.out.println("The highest number is: "+num1);
                else if ((num2>num1)&&(num2>num3)) // here we are comparing num2
   with num1 and num3
                       System.out.println("The highest number is: "+num2);
                else
                       System.out.println("The highest number is: "+num3);
                sc.close();
         }
   }
1.2 Output:
   Provide 3 numbers to find the highest among them
   Enter Number 1-
   45
   Enter Number 2-
   Enter Number 3-
   456
   Given numbers are 45, 89, and 456
   The highest number is: 456
```

1.3Output Screenshots:

```
☑ Hello.java
                                Operators.java
                                                                       ☑ Highest.java 
☑ PrintingX.java
                                                                                                                                                  SumOfTwo.java
                                                                                                                                                                                               PatternX.java
     1 import java.util.Scanner;
     2 public class Highest {
     30
                     public static void main(String[] args) {
                               Scanner sc=new Scanner(System.in);
     4
     5
                               System.out.println("Provide 3 numbers to find the highest among them");
     6
                               /* This program is to find the highest among given 3 numbers.
                                 * As this involves decision I am using if-else to find the highest number*/
     7
     8
                               System.out.println("Enter Number 1- ");
                               int num1 = sc.nextInt();
     9
   10
                               System.out.println("Enter Number 2- ");
   11
                               int num2 = sc.nextInt();
                               System.out.println("Enter Number 3- ");
  12
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                               int num3 = sc.nextInt();
                               System.out.println("Given numbers are "+num1+", "+num2+", and "+num3);
  14
  15
                               if ((num1>num2)&&(num1>num3)) // here we are comparing num1 with num2 and num3
  16
                                         System.out.println("The highest number is: "+num1);
  17
                               else if ((num2>num1)&&(num2>num3)) // here we are comparing num2 with num1 and num3
  18
                                         System.out.println("The highest number is: "+num2);
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  20
                                         System.out.println("The highest number is: "+num3);
  21
                               sc.close();
  22
                     }
  23 }
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    Problems @ Javadoc    Declaration    □ Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Co
<terminated> Highest [Java Application] C:\Program Files\Java\jdk-11.0.1\bin\javaw.exe (Nov 22, 2018, 12:16:40 AM)
Provide 3 numbers to find the highest among them
Enter Number 1-
Enter Number 2-
89
Enter Number 3-
Given numbers are 45, 89, and 456
The highest number is: 456
```

2. Problem Statement: Write a program to print the following pattern:

```
* *

* *

*

* *
```

```
2.1 Source Code: File Name – PatternX.Java
```

```
public class PatternX
{
    public static void main(String[] args)
    {
        int num=5; // Pattern provided in statement is in 5 lines
        System.out.println("Printing X Pattern -\n");
        for(int i=0;i<num;i++) //this loop is used to enter into new line</pre>
```

```
for(int j=0;j<num;j++) // this loop is used for printing the

pattern

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

2.2 Output:
Printing X Pattern -

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```

```
Operators.java

☑ PatternX.java 
☒
☑ Hello.java
                                                                                                                     Highest.java
                                                                                                                                                                               PrintingX.java
                                                                                                                                                                                                                                              ☑ SumOfTwo.java
         1 public class PatternX
        2 {
         3⊝
                                  public static void main(String[] args)
         4
         5
                                                  int num=5; // Pattern provided in statement is in 5 lines
         6
                                                  System.out.println("Printing X Pattern -\n");
         7
                                                  for(int i=0;i<num;i++) //this loop is used to enter into new line</pre>
         8
                                                                  for(int j=0;j<num;j++) // this loop is used for printing the pattern</pre>
        9
     10
     11
                                                                                  if(j==i || j==num-i-1)
                                                                                                   System.out.print("*");
     12
    13
                                                                                  else
                                                                                                  System.out.print(" ");
    14
    15
    16
                                                                  System.out.println();
    17
   18
                                 }
    19
    20 }
    21

    Problems @ Javadoc    Declaration    □ Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console     Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Console    Co
<terminated> PatternX [Java Application] C:\Program Files\Java\jdk-11.0.1\bin\javaw.exe (Nov 22, 2018, 12:24:37 AM)
Printing X Pattern -
```

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