

Task Solution

1) Write a program to print the numbers from 10 to 50 using for loop/while loop.

```
Main.java
1 import java.util.Scanner;
2 public class Main{
3     public static void main(String[] args){
4         Scanner input = new Scanner(System.in);
5         System.out.println("Enter the starting number:");
6         int s = input.nextInt();
7         System.out.println("Enter the ending number:");
8         int n = input.nextInt();
9         while(s <= n){
10            System.out.print(s + " ");
11            s++;
12        }
13    }
14 }
```

The output is:

```
Output
Enter the starting number:
10
Enter the ending number:
50
10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38
39 40 41 42 43 44 45 46 47 48 49 50
=== Code Execution Successful ===
```

2) Write a program that find a given number is positive or negative.

```
Main.java
1 import java.util.Scanner;
2 public class Pos{
3     public static void main(String[] args){
4         Scanner input = new Scanner(System.in);
5         System.out.println("Enter the number:");
6         int num= input.nextInt();
7         if(num >= 0){
8             System.out.println(num + " is positive");
9         }
10        else{
11            System.out.println(num + " is negative");
12        }
13    }
14 }
```

The output is:

n	Output
	Enter the number: 123 123 is positive === Code Execution Successful ===

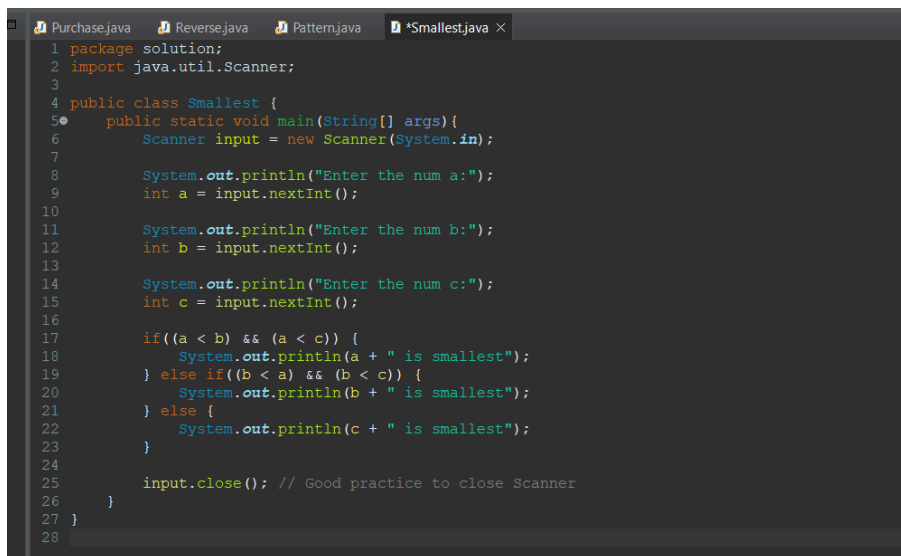
3)Write down the program to reverse the given number using loops.

```
Purchase.java  *Reverse.java  Pattern.java
1 package solution;
2 import java.util.Scanner;
3 public class Reverse{
4     public static void main(String[] args){
5         Scanner input = new Scanner(System.in);
6         System.out.println("Enter the num:");
7         String n = input.nextLine();
8         for(int i = n.length()-1; i >= 0; i--){
9             System.out.print( n.charAt(i));
10        }
11    }
12 }
```

The output is:

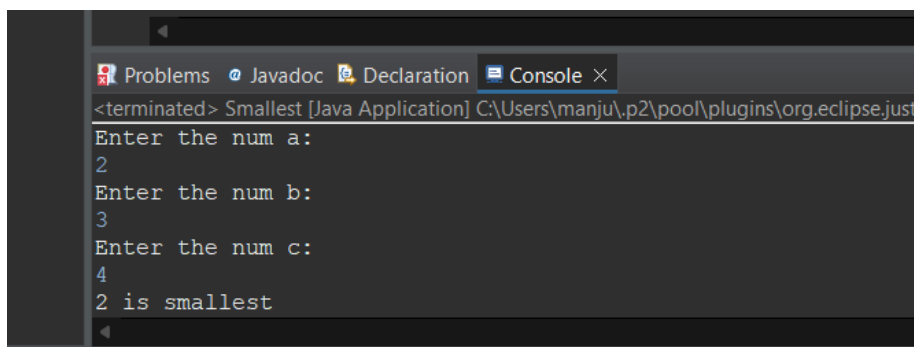
```
Problems  Javadoc  Declaration  Console  X
<terminated> Reverse [Java Application] C:\Users\manju\p2\pool\plugins\org.eclipse.justj.ope
Enter the num:
45566
66554
Writable  Smart
```

4) Write a java program to Find the smallest number among three numbers.



```
1 package solution;
2 import java.util.Scanner;
3
4 public class Smallest {
5     public static void main(String[] args) {
6         Scanner input = new Scanner(System.in);
7
8         System.out.println("Enter the num a:");
9         int a = input.nextInt();
10
11        System.out.println("Enter the num b:");
12        int b = input.nextInt();
13
14        System.out.println("Enter the num c:");
15        int c = input.nextInt();
16
17        if((a < b) && (a < c)) {
18            System.out.println(a + " is smallest");
19        } else if((b < a) && (b < c)) {
20            System.out.println(b + " is smallest");
21        } else {
22            System.out.println(c + " is smallest");
23        }
24
25        input.close(); // Good practice to close Scanner
26    }
27 }
28
```

The output is:



```
<terminated> Smallest [Java Application] C:\Users\manju\p2\pool\plugins\org.eclipse.jst
Enter the num a:
2
Enter the num b:
3
Enter the num c:
4
2 is smallest
```

5) Write a Java program that takes the purchase amount as input and calculates the final payable amount after applying the discount.

1. If the purchase amount is less than 500, no discount is applied.
2. If the purchase amount is between 500 and 1000, a 10% discount is applied.
3. If the purchase amount is greater than 1000 a 20% discount is applied

```

Purchase.java x Reverse.java *Pattern.java
1 package solution;
2 import java.util.Scanner;
3 public class Purchase {
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6         System.out.println("Enter the amount:");
7         double n = input.nextDouble();
8
9         if (n < 500) {
10             System.out.println("No discount is applied!, the amount is = " + n);
11         } else if (n >= 500 && n <= 1000) {
12             System.out.println("10% discount is applied!, the amount is = " + (n - (n / 10)));
13         } else if (n > 1000) {
14             System.out.println("20% discount is applied!, the amount is = " + (n - (n / 20)));
15         }
16     }
17 }

```

The output is:

```

Problems Javadoc Declaration Console x
<terminated> Purchase [Java Application] C:\Users\manju\p2\pool\plugins\org.eclipse.justj.openjd
Enter the amount:
600
10% discount is applied!, the amount is = 540.0

```

6) Write a java program to print bellowed pattern i and j and k→5

```

55555
54444
54333
54322
54321

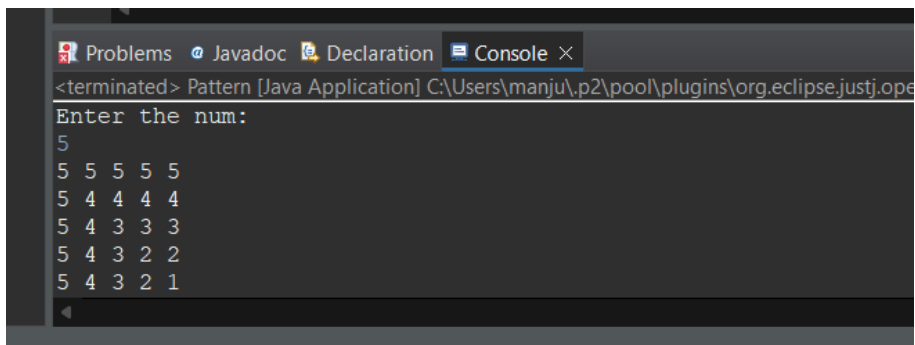
```

```

Purchase.java Reverse.java *Pattern.java x
1 package solution;
2 import java.util.Scanner;
3 public class Pattern {
4     public static void main(String[] args) {
5         Scanner input = new Scanner(System.in);
6         System.out.println("Enter the num:");
7         int n = input.nextInt();
8
9         for (int i = 0; i < n; i++) {
10             for (int j = 0; j <= i; j++) {
11                 System.out.print((n - j) + " ");
12             }
13             for (int k = 0; k < n - i - 1; k++) {
14                 System.out.print((n - i) + " ");
15             }
16             System.out.println();
17         }
18     }
19 }
20 }
21 }
22

```

The output is:



The screenshot shows the Eclipse IDE's console window. The title bar includes tabs for 'Problems', 'Javadoc', 'Declaration', and 'Console'. The console text is as follows:

```
<terminated> Pattern [Java Application] C:\Users\manju\p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe  
Enter the num:  
5  
5 5 5 5 5  
5 4 4 4 4  
5 4 3 3 3  
5 4 3 2 2  
5 4 3 2 1
```

Thank you!