

Exercise 1: Input/Output

Write a program that prompts the user to enter their name and age. Then, print a message including their name and age

```
2  import java.util.Scanner;
3  public class lab3 {
4      public static void main(String args[]){
5          int age;
6          String name;
7          System.out.println(x:"Enter you name and age");
8          Scanner in = new Scanner(System.in);
9          name = in.next();
10         age = in.nextInt();
11         System.out.println("Your name is: " + name + " And your age is: " + age);
12         in.close();
13     }
14 }
15
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
oshans-MacBook-Pro:javaprograms roshanthapa$ cd "/Users/roshanthapa/Desktop/javaprograms/" && javac lab3.java && java lab3
Enter you name and age
roshan
0
our name is: Roshan And your age is: 20
oshans-MacBook-Pro:javaprograms roshanthapa$
```

Exercise 2: Conditional Statements

Write a program that takes a number as input and determines if it's positive, negative, or zero.

java

```
2  import java.util.Scanner;
3  public class lab3 {
4      Run | Debug
5      public static void main(String args[]){
6          int num;
7          Scanner in = new Scanner(System.in);
8          System.out.println(x:"Enter any number");
9          num = in.nextInt();
10         if(num==0){
11             System.out.println(x:"Then number is zero. ");
12         }
13         else if(num>0){
14             System.out.println(x:"The number is positive.");
15         }
16         else{
17             System.out.println(x:"Then number is negative.2");
18         }
19     }
20 }
```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
roshans-MacBook-Pro:javaprograms roshanthapa$ cd "/Users/roshanthapa/Desktop/javaprograms"
Enter any number
```

```
The number is positive.
```

```
roshans-MacBook-Pro:javaprograms roshanthapa$
```

Exercise 3: Loops

Write a program to print the first N natural numbers using a while loop.

```
2  import java.util.Scanner;
3  public class lab3 {
    Run | Debug
4      public static void main(String args[]){
5          int num;
6          Scanner in = new Scanner(System.in);
7          System.out.println(x:"Enter any number");
8          num = in.nextInt();
9          int i=16;
10         while(num!=0){
11             System.out.println(i);
12             i++;
13             num-=1;
14         }
15     }
16 }
17
```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
roshans-MacBook-Pro:javaprograms roshanthapa$ cd "/Users/roshant
Enter any number
6
1
2
3
4
5
6
roshans-MacBook-Pro:javaprograms roshanthapa$ █
```

Exercise 4: Array

Write a program that finds the maximum and minimum elements in an array of integers.

```
1  import java.util.Arrays;
2  public class lab3 {
3      public static void main(String args[]){
4          int array[] = {1,2,3,4,5,-1};
5          Arrays.sort(array);
6          System.out.println("minimum is: " + array[0] + " And maximum is: " + array[array.length-1] );
7      }
8  }
9
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
● roshans-MacBook-Pro:javaprograms roshanthapa$ cd "/Users/roshanthapa/Desktop/javaprograms/" && javac lab3.java && java lab3
  minimum is: -1 And maximum is: 5
○ roshans-MacBook-Pro:javaprograms roshanthapa$
```