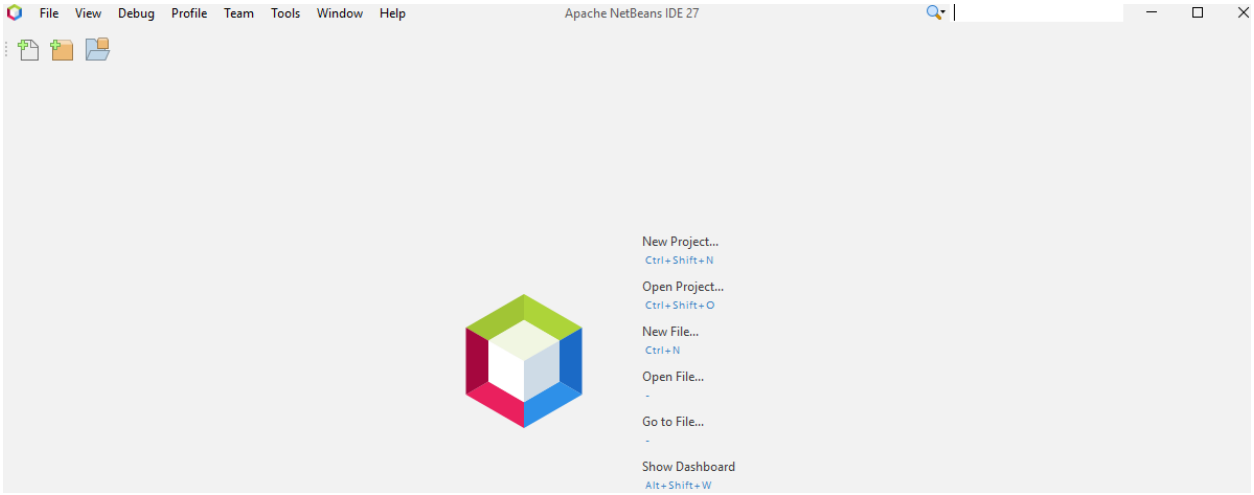
COMSATS University Islamabad Abbottabad Campus

Department of Computer Science

Lab Task 01

Install Java JDK and NetBeans IDE on Your Laptop and create first project

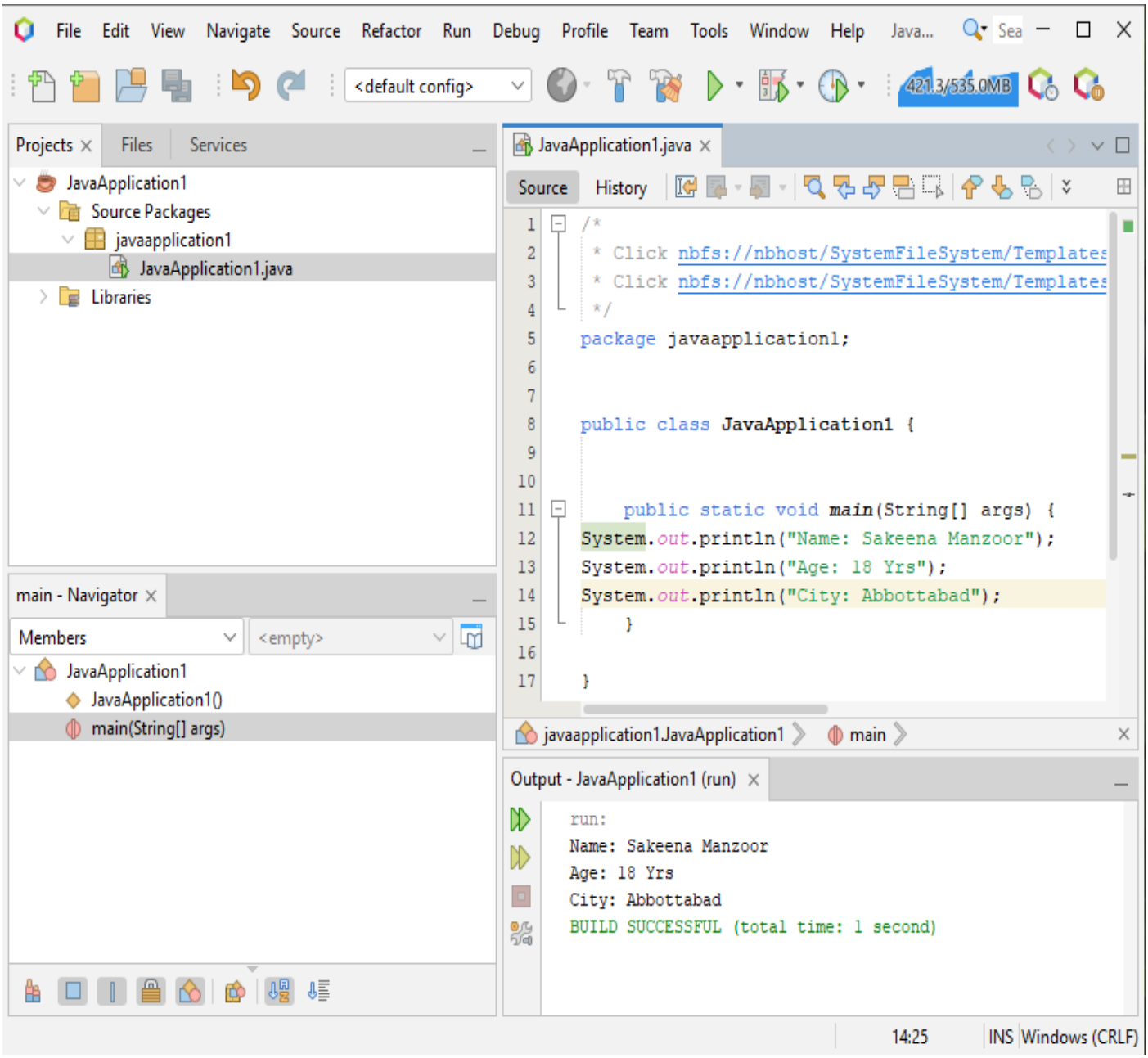
INSTALLED



Lab Task 02

Java Basics Practice

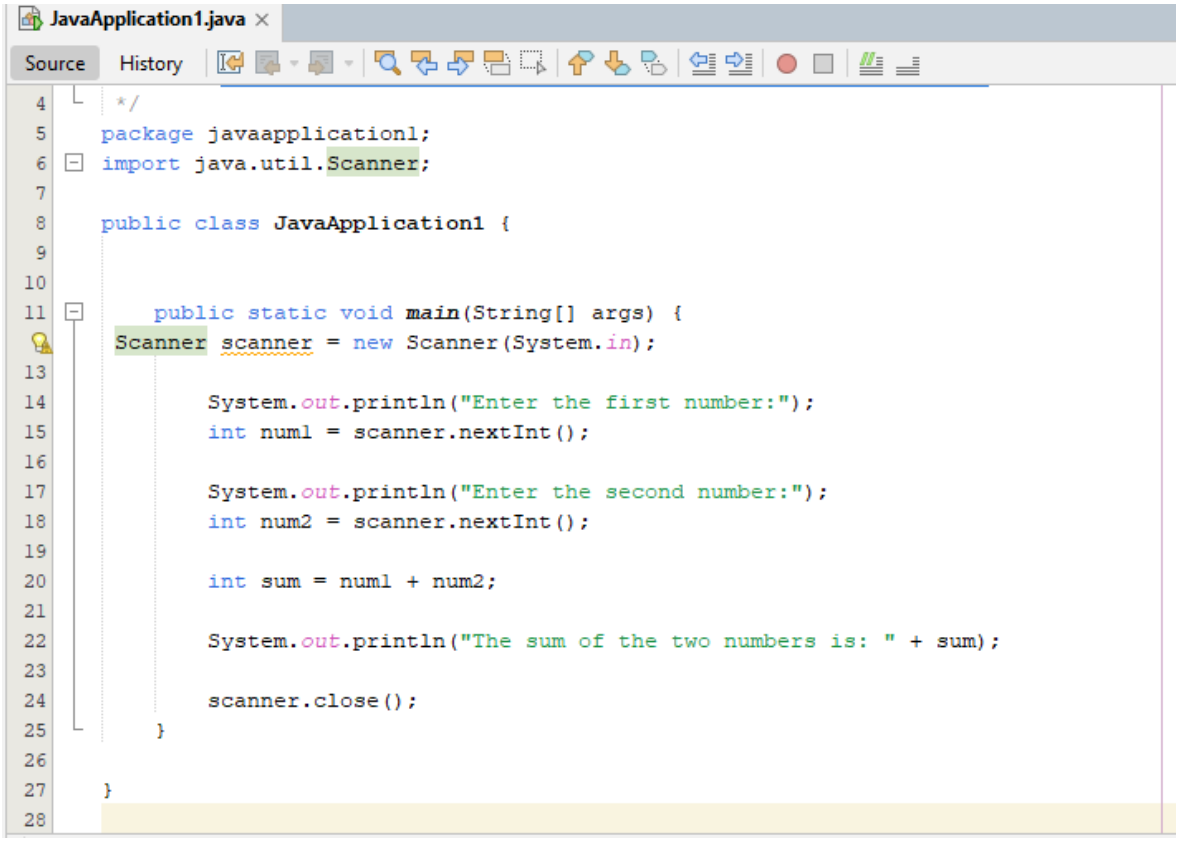
1. **Print Your Details** Write a Java program to print your name, age, and city on the screen.



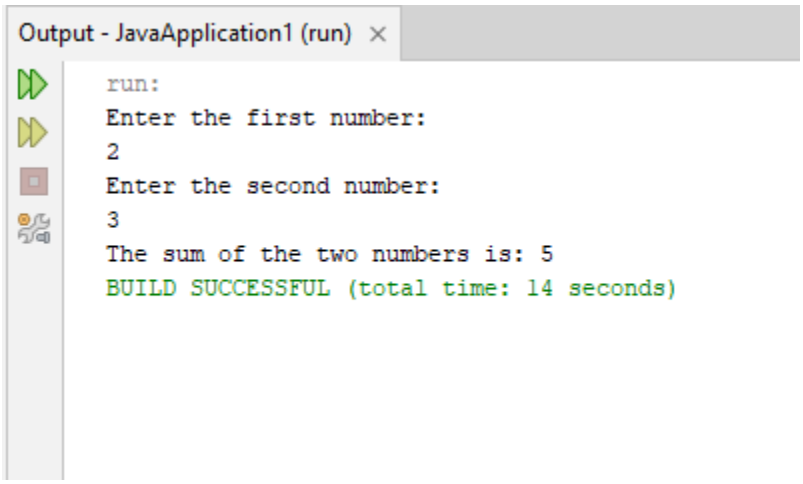
2. **Simple Arithmetic Calculator**

Write a program that takes two numbers as input from the user and displays their sum, difference, product, and quotient.

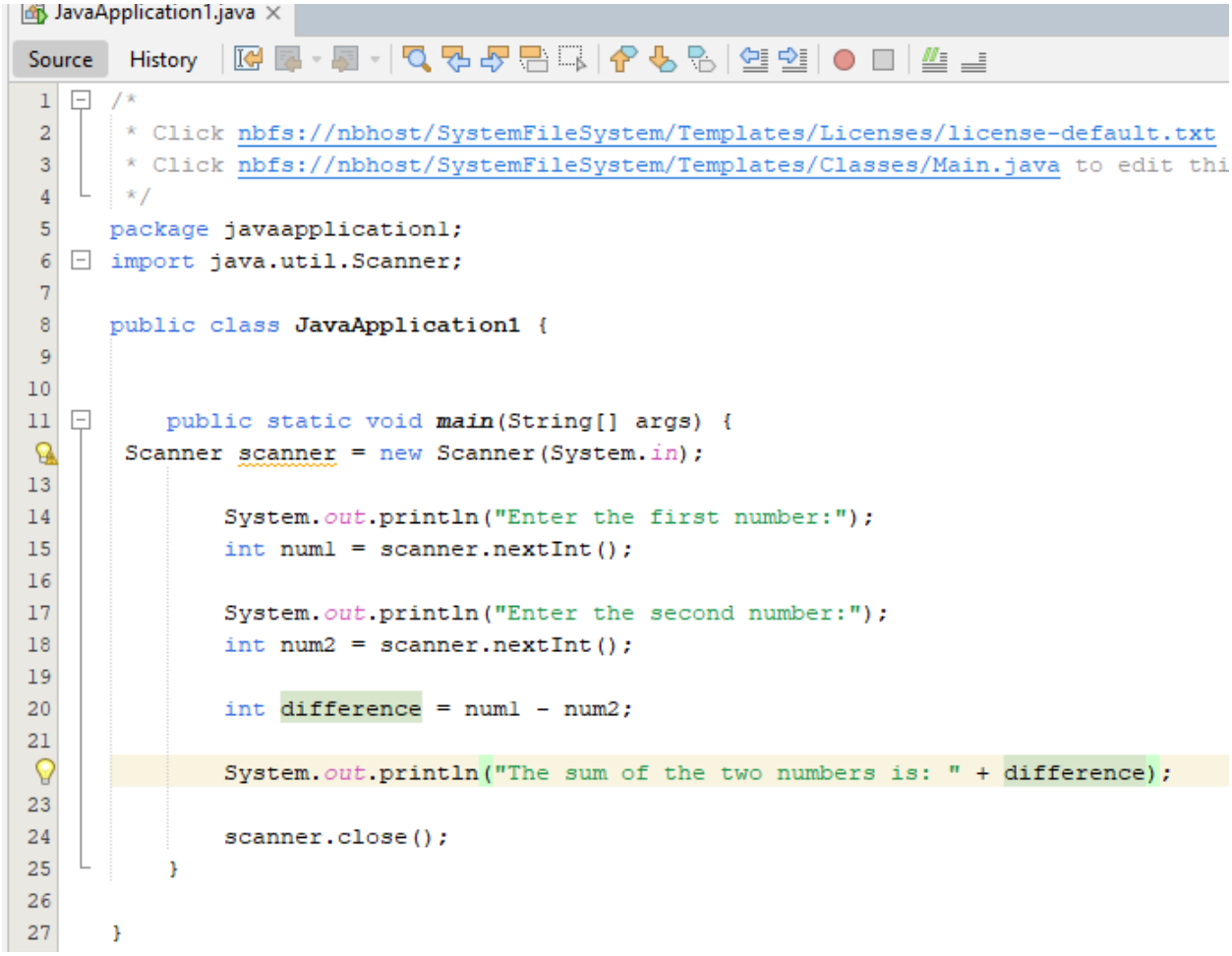
SUM:



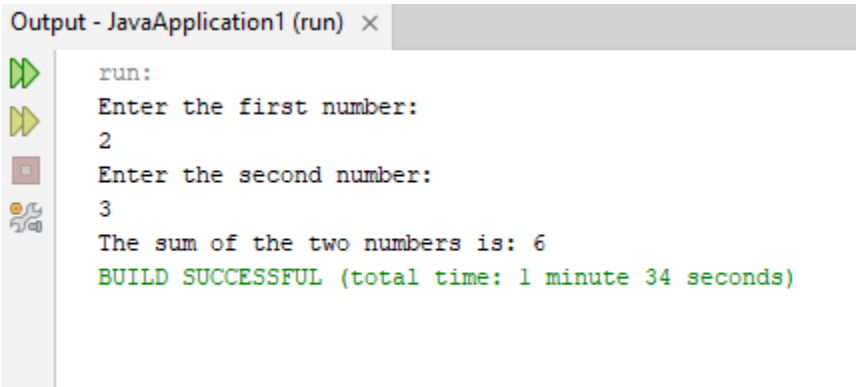
OUTPUT:



DIFFERENCE:



OUTPUT:



PRODUCT

JavaApplication1.java

Source | History

```
5   package javaapplication1;
6   import java.util.Scanner;
7
8   public class JavaApplication1 {
9
10
11      public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
13
14          System.out.println("Enter the first number:");
15          int num1 = scanner.nextInt();
16
17          System.out.println("Enter the second number:");
18          int num2 = scanner.nextInt();
19
20          int product = num1 * num2;
21
            System.out.println("The sum of the two numbers is: " + product);
23
24          scanner.close();
25      }
26
27  }
28
```

OUTPUT:

Output - JavaApplication1 (run)

```
run:
Enter the first number:
2
Enter the second number:
3
The sum of the two numbers is: 6
BUILD SUCCESSFUL (total time: 1 minute 34 seconds)
```

QOUTIENT:

JavaApplication1.java

Source | History

```
7
8   public class JavaApplication1 {
9
10
11      public static void main(String[] args) {
    Scanner scanner = new Scanner(System.in);
13
14          System.out.println("Enter the first number:");
15          int num1 = scanner.nextInt();
16
17          System.out.println("Enter the second number:");
18          int num2 = scanner.nextInt();
19
20          int qoutient = num1/ num2;
21
22          System.out.println("The sum of the two numbers is: " + qoutient);
23
24          scanner.close();
25      }
26
27  }
```

OUTPUT:

Output - JavaApplication1 (run)

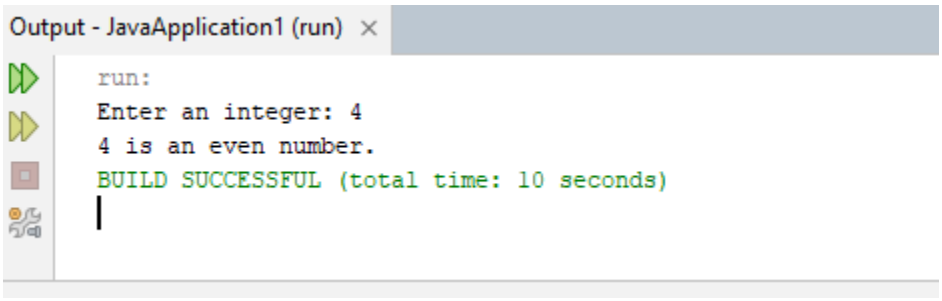
```
run:
Enter the first number:
4
Enter the second number:
2
The sum of the two numbers is: 2
BUILD SUCCESSFUL (total time: 8 seconds)
```

3. Even or Odd Number Write a program that asks the user to enter a number and prints whether it is even or odd.

PROGRAM:

```java
*/
package javaapplication1;
import java.util.Scanner;

public class JavaApplication1 {

    public static void main(String[] args) {
   Scanner scanner = new Scanner(System.in);

        // Prompt the user to enter a number
        System.out.print("Enter an integer: ");

        int number = scanner.nextInt();

        if (number % 2 == 0) {
            System.out.println(number + " is an even number.");
        } else {
            System.out.println(number + " is an odd number.");
        }
        scanner.close();
    }

}
```

OUTPUT:



4. Temperature Converter Write a Java program to convert a temperature from Celsius to Fahrenheit. The formula is: Fahrenheit = (Celsius × 9/5) + 32 .

PROGRAM:

```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Main.java to edit this t
 */
package javaapplication1;
import java.util.Scanner;

public class JavaApplication1 {

    public static void main(String[] args) {
Scanner input = new Scanner(System.in);

        System.out.print("Enter temperature in Celsius: ");
        double celsius = input.nextDouble();


        double fahrenheit = (celsius * 9 / 5) + 32;

        System.out.println("Temperature in Fahrenheit: " + fahrenheit + "°F");

        input.close();
    }

}
```

OUTPUT:

```
Output - JavaApplication1 (run)
run:
Enter temperature in Celsius: 33
Temperature in Fahrenheit: 91.4F
BUILD SUCCESSFUL (total time: 5 seconds)
```

5. Find the Largest Number Write a program that asks the user to enter three numbers and prints the largest number among them.

PROGRAM:

JavaApplication1.java

Source | History

```java
/*
 * Click nbfs://nbhost/SystemFileSystem/Templates/Classes/Main.java to edit this temp
 */
package javaapplication1;
import java.util.Scanner;

public class JavaApplication1 {

    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter the first number: ");
        int num1 = input.nextInt();
        System.out.print("Enter the second number: ");
        int num2 = input.nextInt();
        System.out.print("Enter the third number: ");
        int num3 = input.nextInt();
        int largest;
        if (num1 >= num2 && num1 >= num3) {
            largest = num1;
        } else if (num2 >= num1 && num2 >= num3) {
            largest = num2;
        } else {
            largest = num3;
        }
        System.out.println("The largest number is: " + largest);
        input.close();
    }

}
```

javaapplication1.JavaApplication1 > main

OUTPUT:

Output - JavaApplication1 (run)

```
run:
Enter the first number: 1
Enter the second number: 2
Enter the third number: 3
The largest number is: 3
BUILD SUCCESSFUL (total time: 16 seconds)
```

6. Day of the Week Using Switch Write a program that asks the user to enter a number (1–7) and prints the corresponding day of the week using a switch statement.

PROGRAM:

JavaApplication1.java

```
Scanner input = new Scanner(System.in);
        System.out.print("Enter a number (1-7) to get the corresponding day of the week: ");
        int dayNumber = input.nextInt();
        switch (dayNumber) {
            case 1:
                System.out.println("Sunday");
                break;
            case 2:
                System.out.println("Monday");
                break;
            case 3:
                System.out.println("Tuesday");
                break;
            case 4:
                System.out.println("Wednesday");
                break;
            case 5:
                System.out.println("Thursday");
                break;
            case 6:
                System.out.println("Friday");
                break;
            case 7:
                System.out.println("Saturday");
                break;
            default:
                System.out.println("Invalid input. Please enter a number between 1 and 7.");
        }
```

Output - JavaApplication1 (run)

```
run:
Enter a number (1-7) to get the corresponding day of the week: 4
Wednesday
BUILD SUCCESSFUL (total time: 10 seconds)
```