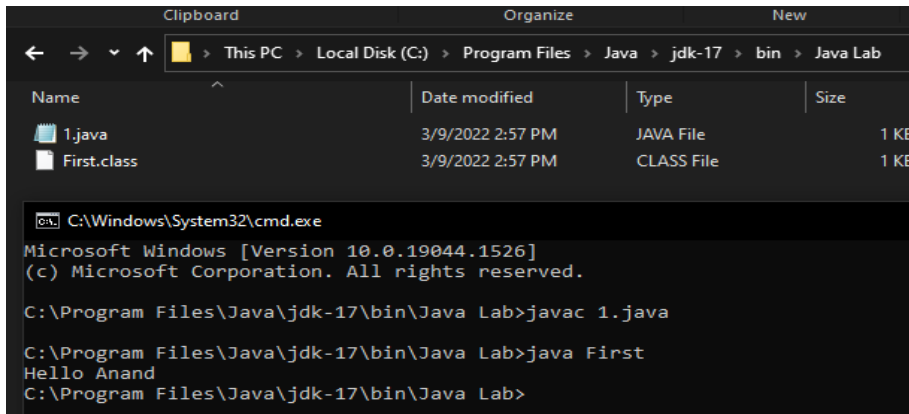


# Java Lab Program

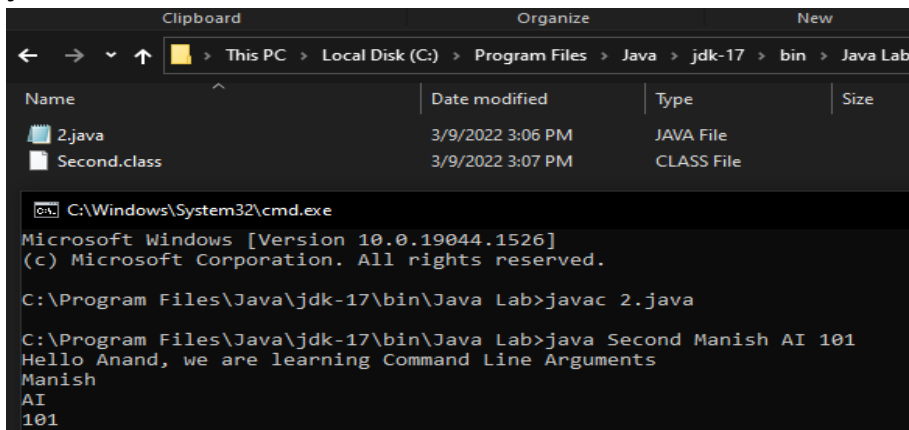
1. Write a program to print "Hello Anand" in Java.

```
import java.lang.*;
class First
{
    public static void main(String arg[])
    {
        System.out.print("Hello Anand");
    }
}
```



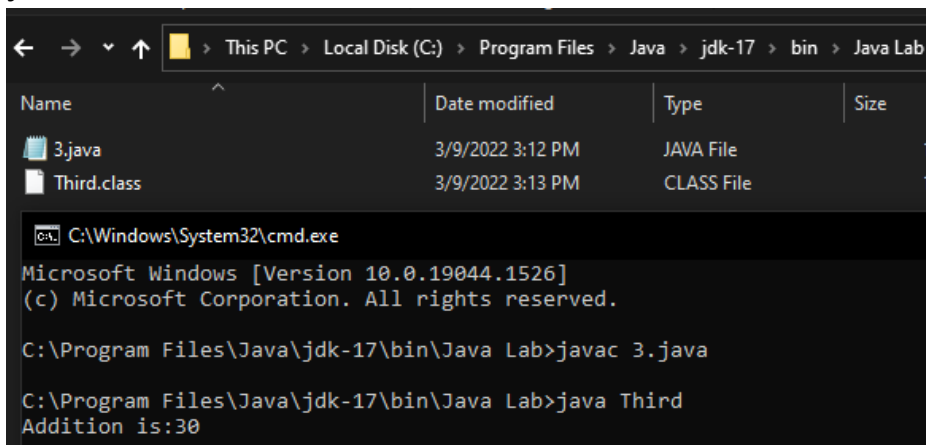
2. Write a program to print Command Line Arguments in Java.

```
import java.lang.*;
class Second
{
    public static void main(String arg[])
    {
        System.out.println("We are learning Command Line Arguments");
        System.out.println(arg[0]);
        System.out.println(arg[1]);
        System.out.println(arg[2]);
    }
}
```



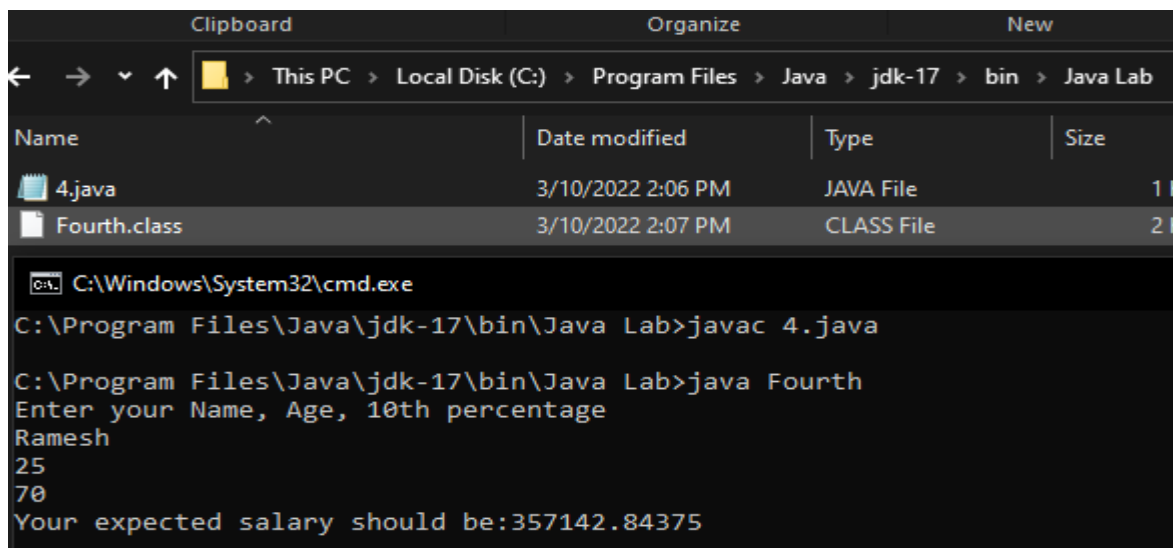
3. Write a program to perform simple addition of two numbers in Java.

```
import java.lang.*;
class Third
{
    public static void main(String arg[])
    {
        int a=10;
        int b=20;
        int c=a+b;
        System.out.println("Addition is:" + c);
    }
}
```



4. Write a program to take user input using Scanner Class.

```
import java.lang.*;
import java.util.Scanner;
class Fourth
{
    public static void main(String arg[])
    {
        Scanner sc=new Scanner(System.in);
        System.out.println("Enter your Name, Age, 10th percentage");
        String name=sc.nextLine();
        int age=sc.nextInt();
        float per=sc.nextFloat();
        double salary=(age*100)/per;
        System.out.println("Your expected salary should be:" + salary);
    }
}
```



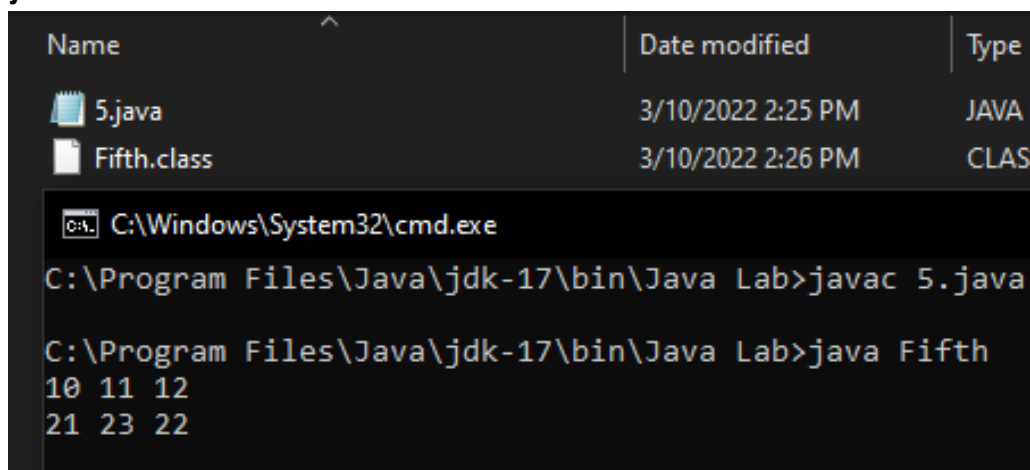
5. Write a program to show Array declaration, instantiation, and initialization.

```
import java.lang.*;
class Fifth
{
    public static void main(String arg[])
    {
        int a[]; //declaration
        a = new int[3]; //instantiation
        a[0]=10; //initialization
        a[1]=11;
        a[2]=12;

        int b[] = {21, 23, 22}; //declaration and initialization

        System.out.println(a[0]+" "+a[1]+" "+a[2]);
        System.out.println(b[0]+" "+b[1]+" "+b[2]);

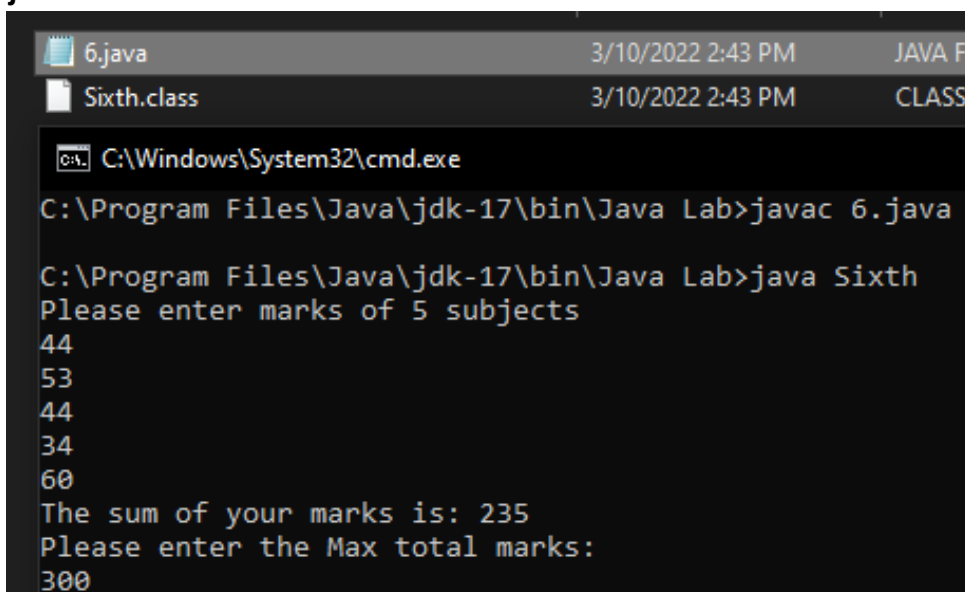
    }
}
```



6. Write a program to show difference between for-loop and foreach-loop.

```
import java.lang.*;
import java.util.Scanner;
class Sixth
{
    public static void main(String arg[])
    {
        Scanner sc = new Scanner(System.in);
        int sum=0, total=0, per=0;
        int a[] = new int[5]; //Array creation
        System.out.println("Please enter marks of 5 subjects");
        for(int i=0; i<5; i++)
        {
            a[i] = sc.nextInt();
        }
        System.out.print("The sum of your marks is: ");
        for(int j:a)
        {
            sum = sum+j;
        }
        System.out.println(sum);
        System.out.println("Please enter the Max total marks: ");
        total = sc.nextInt();
        System.out.print("Your calculated percentage is:");
        per=(sum*100)/total;
        System.out.print(per);

    }
}
```

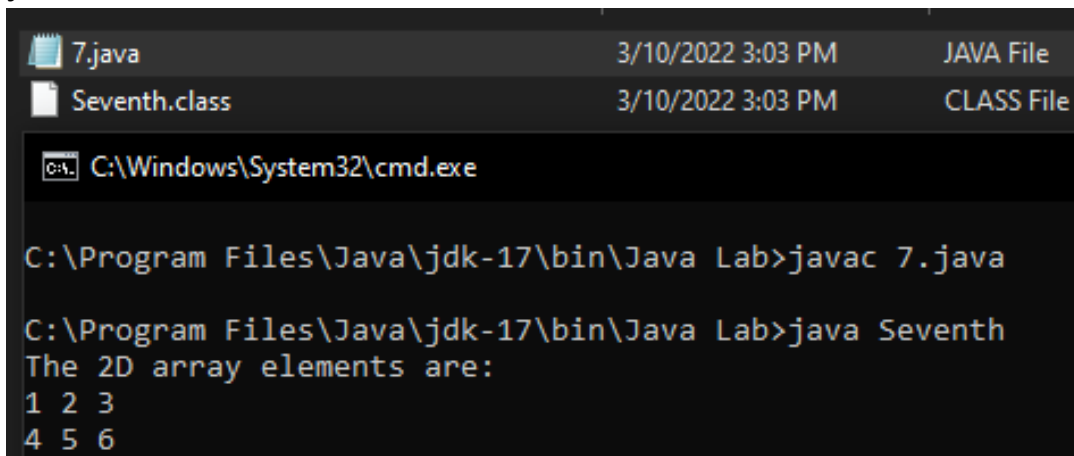


The screenshot shows a Java IDE with two files: 6.java and Sixth.class. The command prompt shows the compilation and execution of the program. The output shows the sum of marks as 235 and the percentage as 300.

```
C:\Windows\System32\cmd.exe
C:\Program Files\Java\jdk-17\bin\Java Lab>javac 6.java
C:\Program Files\Java\jdk-17\bin\Java Lab>java Sixth
Please enter marks of 5 subjects
44
53
44
34
60
The sum of your marks is: 235
Please enter the Max total marks:
300
```

7. Write a program to show 2D array operation.

```
import java.lang.*;
class Seventh
{
    public static void main(String arg[])
    {
        int a[][] = {{1,2,3}, {4,5,6}}; //2D Array declaraion and initialization
        System.out.println("The 2D array elements are:");
        for(int i=0; i<2; i++)
        {
            for(int j=0; j<3; j++)
            {
                System.out.print(a[i][j]+" ");
            }
            System.out.println();
        }
    }
}
```



The screenshot shows a file explorer window with two files: 7.java and Seventh.class, both dated 3/10/2022 3:03 PM. Below the file explorer is a command prompt window titled 'C:\Windows\System32\cmd.exe'. The command prompt shows the following commands and output:

```
C:\Program Files\Java\jdk-17\bin\Java Lab>javac 7.java
C:\Program Files\Java\jdk-17\bin\Java Lab>java Seventh
The 2D array elements are:
1 2 3
4 5 6
```