CAJD Lab – Submission 2 - 221047012

1) What is the significance of passing the string arguement in main method?
Ans: The main() method also accepts some data from the user. It accepts a group of strings, which is called a string array. It is used to hold the command line arguments in the form of string values. Here, agrs[] is the array name, and it is of String type.

2a)

```
package lab2_221047012;
import java.util.Scanner;

public class AvgNo {
        public svoid average()
          {
         int n, count = 1;
    float  xF, averageF, sumF = 0;
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter the value of n");
    n = sc.nextInt();
    while (count <= n)
        {
            System.out.println("Enter the "+count+" number?");
            xF = sc.nextInt();
            sumF += xF;
            ++count;
        }
            averageF = sumF/n;
     System.out.println("The Average is"+averageF);
}
}
```

2b)

```
package lab2_221047012;
import java.util.Scanner;

public class calculator {

            public void calci()
            {

               double num1, num2;

               Scanner sc = new Scanner(System.in);      // Taking input from the user

               System.out.println("Enter the numbers");

               // take the inputs
               num1 = sc.nextDouble();

               num2 = sc.nextDouble();

               System.out.println("Enter the operator (+,-,*,/)");
```

```
        char op = sc.next().charAt(0);

        double o = 0;

        switch (op) {

        // case to add two numbers
        case '+':

            o = num1 + num2;

            break;

        // case to subtract two numbers
        case '-':

            o = num1 - num2;

            break;

        // case to multiply two numbers
        case '*':

            o = num1 * num2;

            break;

        // case to divide two numbers
        case '/':

            o = num1 / num2;

            break;

        default:

            System.out.println("You enter wrong input");

            break;
        }

        System.out.println("The final result:");

        System.out.println();

        // print the final result
        System.out.println(num1 + " " + op + " " + num2
                        + " = " + o);
    }
}
```

2c)

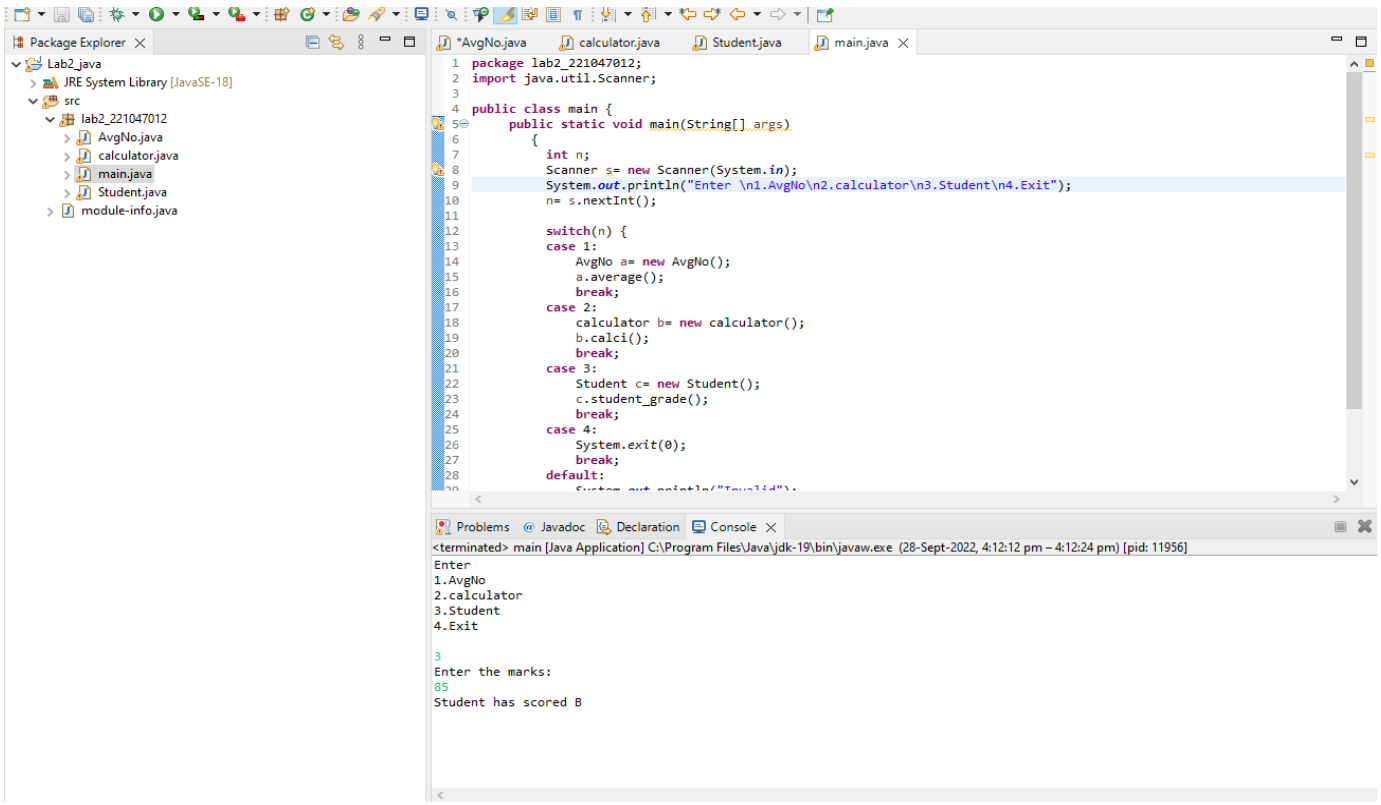
```
package lab2_221047012;
```

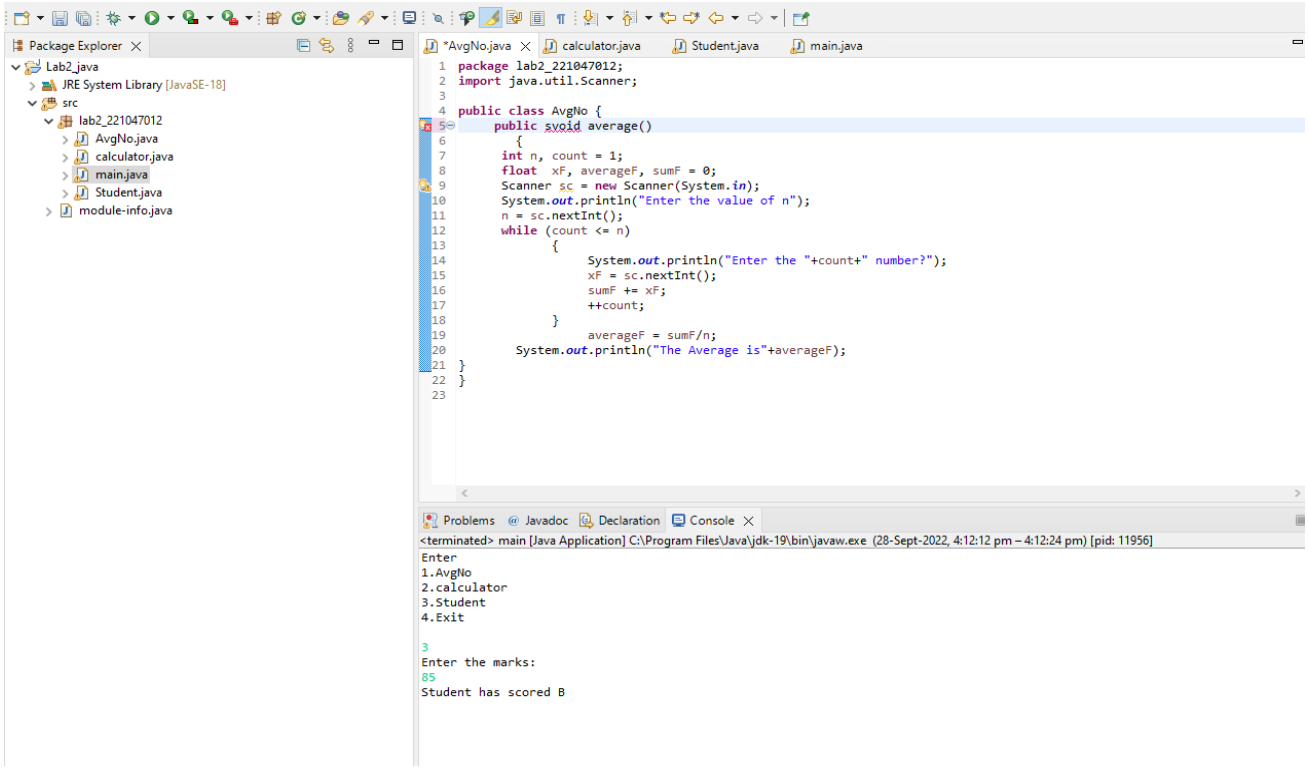
```
import java.util.Scanner;

public class Student {
	public void student_grade()
	  {

		double m;

		Scanner sc = new Scanner(System.in);

	    System.out.println("Enter the marks: ");

	    // take the inputs
	    m = sc.nextDouble();


	    if (m>0 && m<=59 ) {
	       System.out.println(
	          "Student has scored F grade");
	    }
	    else if (m>59 && m<=69) {
	       System.out.println(
	          "Student has scored D");
	    }
	    else if (m>69 && m<=79) {
	       System.out.println(
	          "Student has scored C");
	    }
	   else if (m>79 && m<=89) {
	       System.out.println(
	          "Student has scored B");
	    }
	    else if (m>89 && m<=100) {
	       System.out.println(
	          "Student has scored A");
	    }
	    else {
	       System.out.println(
	          "The mark you entered is not valid!");
	    }
	  }
	}
```

Main method:

```
package lab2_221047012;
import java.util.Scanner;

public class main {
	public static void main(String[] args)
	  {
		int n;
		Scanner s= new Scanner(System.in);
		System.out.println("Enter \n1.AvgNo\n2.calculator\n3.Student\n4.Exit");
		n= s.nextInt();
```

```
                switch(n) {
                case 1:
                        AvgNo a= new AvgNo();
                        a.average();
                        break;
                case 2:
                        calculator b= new calculator();
                        b.calci();
                        break;
                case 3:
                        Student c= new Student();
                        c.student_grade();
                        break;
                case 4:
                        System.exit(0);
                        break;
                default:
                        System.out.println("Invalid");
                }
        }
}
```




Package Explorer
Lab2_java
JRE System Library [JavaSE-18]
src
lab2_221047012
AvgNo.java
calculator.java
main.java
Student.java
module-info.java
*AvgNo.java
calculator.java
Student.java
main.java
1 package lab2_221047012;
2 import java.util.Scanner;
3
4 public class AvgNo {
5 public svoid average()
6 {
7 int n, count = 1;
8 float xF, averageF, sumF = 0;
9 Scanner sc = new Scanner(System.in);
10 System.out.println("Enter the value of n");
11 n = sc.nextInt();
12 while (count <= n)
13 {
14 System.out.println("Enter the "+count+" number?");
15 xF = sc.nextInt();
16 sumF += xF;
17 ++count;
18 }
19 averageF = sumF/n;
20 System.out.println("The Average is"+averageF);
21 }
22 }
23
Problems
Javadoc
Declaration
Console
<terminated> main [Java Application] C:\Program Files\Java\jdk-19\bin\javaw.exe (28-Sept-2022, 4:12:12 pm – 4:12:24 pm) [pid: 11956]
Enter
1.AvgNo
2.calculator
3.Student
4.Exit
3
Enter the marks:
85
Student has scored B