S/W Testing Lab Assignment 1

ः mastery	none
assignment	assignment 🗸
ः progress	done
a date	@January 24, 2024

1. WAP to add and multiply 2 numbers, take user input.

```
// Program1
import java.util.Scanner;
public class program1 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter first number: ");
        int num1 = scanner.nextInt();
        System.out.print("Enter second number: ");
        int num2 = scanner.nextInt();
        scanner.close();
        int sum = num1 + num2;
        int product = num1 * num2;
        System.out.println("Sum: " + sum);
        System.out.println("Product: " + product);
    }
}
//Output
Enter first number: 42
Enter second number: 76
```

Sum: 118
Product: 3192

2. WAP to swap 2 numbers with and without a temporary variable.

```
//Program2
import java.util.Scanner;
public class program2 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("\\nEnter first number: ");
        int num1 = scanner.nextInt();
        System.out.print("Enter second number: ");
        int num2 = scanner.nextInt();
        scanner.close();
        System.out.println("\\nBefore swapping:");
        System.out.println("Number 1 = " + num1);
        System.out.println("Number 2 = " + num2 + " \setminus n");
        //Without temporary variable
        num1 = num1 + num2;
        num2 = num1 - num2;
        num1 = num1 - num2;
        System.out.println("After swapping: Without Tempora
ry Variable");
        System.out.println("Number 1 = " + num1);
        System.out.println("Number 2 = " + num2 + " \setminus n");
        //With temporary variable
        int temp = num1;
        num1 = num2;
        num2 = temp;
```

```
System.out.println("After swapping: With Temporary
Variable");
    System.out.println("Number 1 = " + num1);
    System.out.println("Number 2 = " + num2 + "\\n");
}
```

3. WAP to check whether the number is odd or even.

```
// Program3
import java.util.Scanner;
public class program3 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("\\nEnter a number: ");
        int num = scanner.nextInt();
        scanner.close();
        if (num % 2 == 0) {
            System.out.println(num + " is even.");
        } else if (num > 0) {
            System.out.println(num + " is odd.");
        } else {
            System.out.println("Invalid input.");
        }
    }
}
```

4. WAP to check whether the alphabet is a vowel or consonant. (using switch case)

```
// Program4
public class program5 {
   public static void main(String[] args) {
     for (int i = 1; i <= 5; i++) {
        System.out.print(i + " ");
}</pre>
```

```
}
}
```

5. WAP to display numbers from 1 - 5.

```
// Program5
import java.util.Scanner;
public class program4 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("\\nEnter a character: ");
        char alphabet = scanner.next().charAt(0);
        scanner.close();
        switch (alphabet) {
            case 'a':
            case 'e':
            case 'i':
            case 'o':
            case 'u':
                System.out.println(alphabet + " is a vowe
1.");
                break;
            default:
                System.out.println(alphabet + " is a conson
ant.");
        }
    }
}
```

6. WAP to add all numbers in an array.

```
// Program6
public class program6 {
   public static void main(String[] args) {
```

```
int[] arr = {40, 23, 84, 53, 45};
  int sum = 0;
  for(int i = 0, len = arr.length; i < len; i++) {
      sum += arr[i];
    }
    System.out.println("Sum of all numbers in the arra
y: " + sum);
  }
}</pre>
```

7. WAP to take name and marks (out of 100) as input from user. If marks = (40-100) then print "Pass", else if marks < 40 then print "Fail", else print "wrong output".

```
// Program7
import java.util.Scanner;
public class program7 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("\\nEnter your name: ");
        String name = scanner.nextLine();
        System.out.print("Enter your marks: ");
        int marks = scanner .nextInt();
        scanner.close();
        if (marks >= 40 && marks <= 100) {
            System.out.println("\\n" + name + " has passe
d.");
        } else if (marks < 40) {
            System.out.println("\\n" + name + " has faile
d.");
        } else {
            System.out.println("\\nWrong output.");
        }
```

```
}
}
```

8. WAP to find largest of 3 numbers.

```
// Program8
public class program8 {
    public static void main(String[] args) {
        int[] arr = {44, 23, 64};
        int largest = Arrays.stream(arr).max().getAsInt();
        System.out.println("Largest number in the array: "
+ largest);
    }
}
```

9. WAP to print numbers from 1 - 10 except numbers 5 and 6.