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Lab 3

Ques1: Write a program to take input (a number) of a month (1 - 12) and print its equivalent name of the month.(e.g. 1 to Jan, 2 to Feb. 12 to Dec.) Use Scanner class for user input(Hint-use switch case).

Source Code

```java
package Lab3;
import java.util.*;
public class SayMonth {
        public static void main(String args[]) {
                System.out.println("Hitendra Sisodia");
                System.out.println("500091910");
                Scanner sc = new Scanner(System.in);
                System.out.print("Enter the month: ");
                int input = sc.nextInt();
                switch(input) {
                        case 1:
                                System.out.println("January");
                                break;
                        case 2:
                                System.out.println("February");
                                break;
                        case 3:
                                System.out.println("March");
                                break;
                        case 4:
                                System.out.println("April");
                                break;
                        case 5:
                                System.out.println("May");
                                break;
                        case 6:
                                System.out.println("June");
                                break;
                        case 7:
                                System.out.println("July");
                                break;
                        case 8:
                                System.out.println("August");
                                break;
                        case 9:
                                System.out.println("September");
                                break;
                        case 10:
                                System.out.println("October");
                                break;
                        case 11:
                                System.out.println("November");
                                break;
                        case 12:
                                System.out.println("December");
```

Lab 3

```java
                    break;
            default:
                System.out.println("Enter Valid Month");
        }

    }
}
```

Output

```
Console ×                                                                    ▣ ✖ ❋
<terminated> SayMonth [Java Application] C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe  (Aug 25, 2022, 7:50:31 PM – 7:50:34 PM) [pid: 13660]
Hitendra Sisodia
500091910
Enter the month: 4
April
```
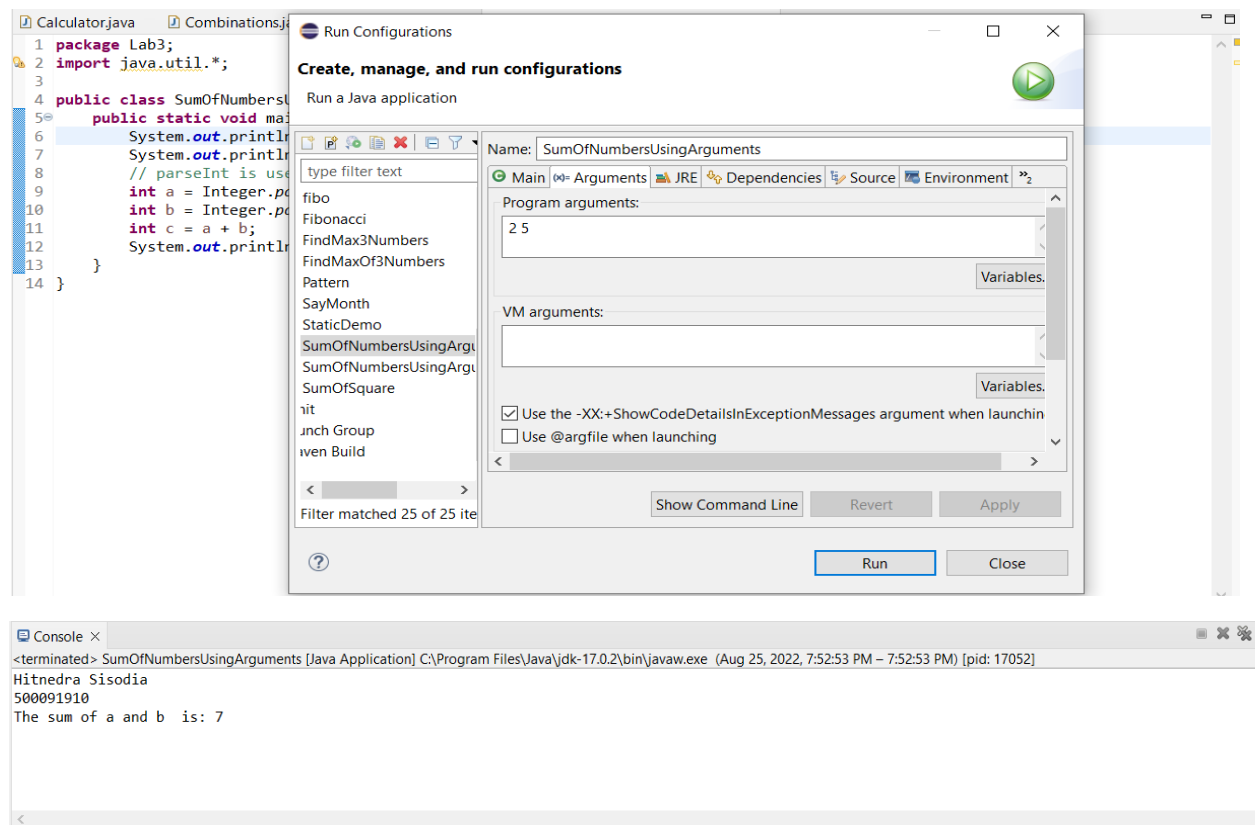
Lab 3

Ques2: Write a program to add two number using command line arguments.

Source Code

```java
package Lab3;
import java.util.*;

public class SumOfNumbersUsingArguments {
    public static void main(String args[]) {
        System.out.println("Hitendra Sisodia");
        System.out.println("500091910");
        // parseInt is used to convert string to integer
        int a = Integer.parseInt(args[0]);
        int b = Integer.parseInt(args[1]);
        int c = a + b;
        System.out.println("The sum of a "+"and b "+" is: "+c);
    }
}
```
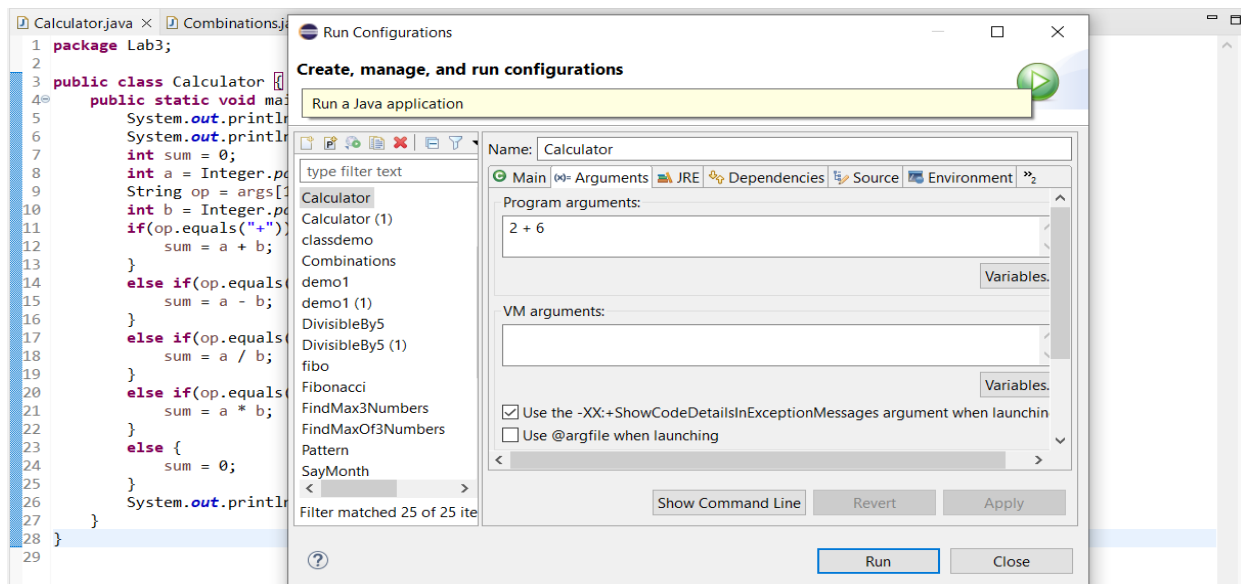
Output

Lab 3

Ques3: Write a program to implement a command line calculator.

Source Code

```java
package Lab3;

public class Calculator {
    public static void main(String args[]) {
        System.out.println("Hitendra Sisodia");
        System.out.println("500091910");
        int sum = 0;
        int a = Integer.parseInt(args[0]);
        String op = args[1];
        int b = Integer.parseInt(args[2]);
        if(op.equals("+")) {
            sum = a + b;
        }
        else if(op.equals("-")) {
            sum = a - b;
        }
        else if(op.equals("/")) {
            sum = a / b;
        }
        else if(op.equals("*")){
            sum = a * b;
        }
        else {
            sum = 0;
        }
        System.out.println("The answer is:"+sum);
    }
}
```

Output

Lab 3

```
Console ×                                                                                    ▬ ✖ ✖
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe  (Aug 25, 2022, 8:01:52 PM – 8:01:52 PM) [pid: 18940]
Hitendra Sisodia
500091910
The answer is:6
```

Ques4: Write a program to accept three digits (i.e., 0 - 9) and print all its possible combinations. (For example, if the three digits are 1, 2, 3 than all possible combinations are: 123, 132, 213, 231, 312, 321.).

Source Code

```java
package Lab3;
import java.util.*;

public class Combinations {
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        int arr[] = {1,2,3};
        for(int i = 0 ; i < 3 ; i++) {
            for(int j = 0 ; j < 3 ; j++) {
                for(int k = 0 ; k < 3 ; k++) {
                    if(i != j && j != k && k != i) {
                        System.out.println("["+arr[i]+" "+arr[j]+"
"+arr[k]+"]");
                    }
                }
            }
        }
    }
}
```

Output

```
Console ×                                                                                    ▬ ✖ ✖
<terminated> Combinations [Java Application] C:\Program Files\Java\jdk-17.0.2\bin\javaw.exe  (Aug 25, 2022, 7:59:48 PM – 7:59:48 PM) [pid: 13648]
[1 2 3]
[1 3 2]
[2 1 3]
[2 3 1]
[3 1 2]
[3 2 1]
```