

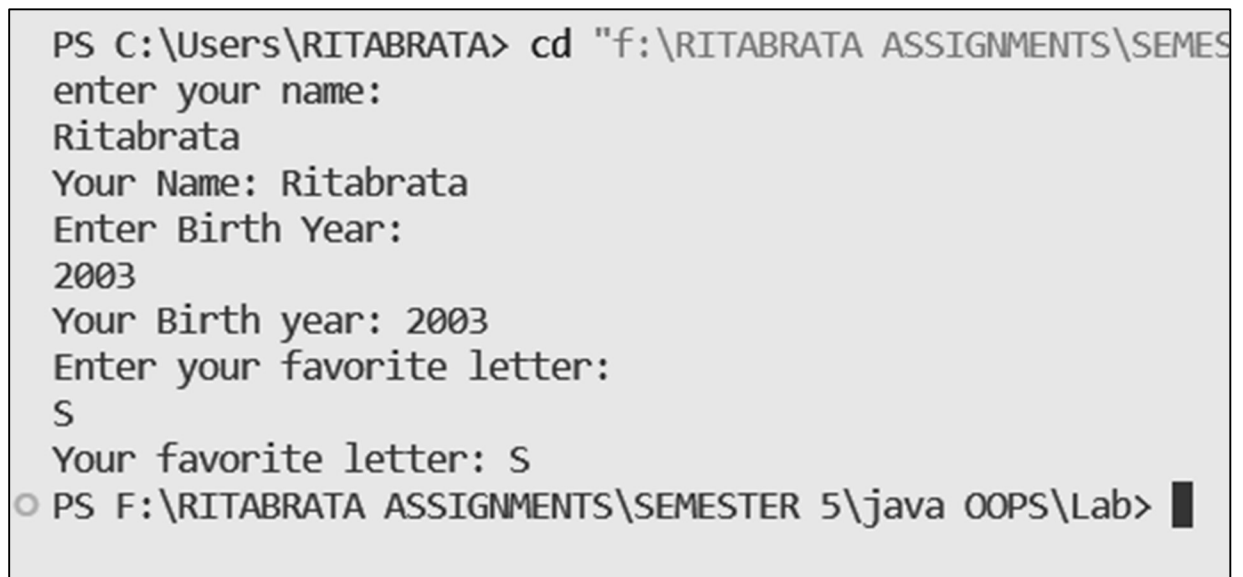
1. Write a Java Program to illustrate Scanner, BufferedReader, BufferedWriter and System class for input and output from terminal and files. (You may write multiple programs as per your wish)

Code:

```
import java.util.Scanner;

public class assignment3p1 {
    public static void main(String[] args) {
        //creating scanner object which uses input feature System
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter your name:");
        String name = sc.nextLine();
        System.out.println("Your Name:"+name);
        System.out.println("Enter Birth Year:");
        int year = sc.nextInt();
        System.out.println("Your Birth year:"+year);
        System.out.println("Enter your favorite letter:");
        char letter = sc.next().charAt(0);
        System.out.println("Your favorite letter:"+letter);
    }
}
```

Output:



```
PS C:\Users\RITABRATA> cd "f:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab"
enter your name:
Ritabrata
Your Name: Ritabrata
Enter Birth Year:
2003
Your Birth year: 2003
Enter your favorite letter:
S
Your favorite letter: S
PS F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>
```

```

import java.io.*;
public class assignment3br {
    public static void main(String[] args) throws Exception{

        FileReader fr = new FileReader("temp.txt");
        BufferedReader br = new BufferedReader(fr);

        String line;
        while((line = br.readLine()) != null) {
            System.out.println(line);
        }
        br.close();
        System.out.println();

        System.out.println();
        InputStreamReader r = new InputStreamReader(System.in);
        BufferedReader isr = new BufferedReader(r);
        System.out.print("enter a line to be written into the file:");
        String addLine = isr.readLine();
        FileWriter fw = new FileWriter("temp.txt",true);
        BufferedWriter bw = new BufferedWriter(fw);
        bw.newLine();
        bw.write(addLine);

        bw.close();
        System.out.println("AFTER WRITING:");
        FileReader fr2 = new FileReader("temp.txt");
        BufferedReader br2= new BufferedReader(fr2);

        String l;
        while((l = br2.readLine()) != null) {
            System.out.println(l);
        }
        br.close();

    }
}

```

Output:

```
PS C:\Users\RITABRATA> cd "f:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\  
Hello  
My  
Name  
Is  
Ritabrata  
  
enter a line to be written into the file:Sankalpa  
AFTER WRITING:  
Hello  
My  
Name  
Is  
Ritabrata  
Sankalpa  
PS F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab> █
```

2. Write a Java Program to implement simple calculator using command line arguments.

Code:

```
import java.io.*;  
  
public class assignment2 {  
    public static void main(String[] args) {  
        //takes variable 1  
        int a = Integer.parseInt(args[0]);  
        //takes variable 2  
        int b = Integer.parseInt(args[2]);  
        String ch = args[1];  
        //perform arithmetic ops based on the operator given in the  
        expression  
        switch(ch) {  
            case "+":  
                int sum = a + b;  
                System.out.println(a+" + "+b+" = "+sum);  
                break;  
            case "-":  
                int sub = a - b;  
                System.out.println(a+" - "+b+" = "+sub);  
                Break;  
            case "x":
```

```

        int mul = a * b;
        System.out.println(a+" * "+b+" = "+mul);
        break;

        case "/":
            double div = a / b;
            System.out.println(a+" / "+b+" = "+div);
            break;
        //default case
        default:
            System.out.println("Wrong Choice");

    }

}

```

Output:

```

F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>javac assignmentday3calcu.java
F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>java assignmentday3calcu 12 + 13
12 + 13 = 25
F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>java assignmentday3calcu 12 - 13
12 - 13 = -1
F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>java assignmentday3calcu 12 x 13
12 * 13 = 156
F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>java assignmentday3calcu 90 / 18
90 / 18 = 5.0
F:\RITABRATA ASSIGNMENTS\SEMESTER 5\java OOPS\Lab>_

```