Q1. Operators

module-info.java | FirstClass.java | leapYear.java | primeNumber.java | loop.java | switchCase.java

```java
package tutorial1;

public class FirstClass {

    public static void main(String[] args) {
        // TODO Auto-generated method stub


        System.out.println(2<<1); //left shift operator

        boolean a = true;
        boolean b = false;

        System.out.println(a && b); //logical operator &&


        int x = 67;
        int y = 3;

        if(x >= y)
            System.out.println(x + " is greater than or equal to "+ y);
        else
            System.out.println(x + " is less than " + y);
    }

}
```

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```
<terminated> FirstClass [Java Application] X:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\
4
false
67 is greater than or equal to 3
```

Q2. Leap year

module-info.java | FirstClass.java | leapYear.java | primeNumber.java | loop.java | switchCase.java

```java
package tutorial1;

public class leapYear {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        int year = 2023;

        if(year%4 == 0)
            System.out.println("The year " + year + " is a leap year");
        else
            System.out.println("The year " + year + " is not a leap year");

    }

}
```

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```
<terminated> leapYear [Java Application] X:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657
The year 2023 is not a leap year
```

Q3. Prime Number

module-info.java | FirstClass.java | leapYear.java | primeNumber.java | loop.java | switcl

```
1  package tutorial1;
2
3  public class primeNumber {
4
5      public static void main(String[] args) {
6          // TODO Auto-generated method stub
7          int n = 67;
8
9          boolean isPrime = true;
10
11         if(n==0 || n==1) {
12             isPrime = false;
13         }
14         else {
15             for (int i = 2; i <= n / 2; ++i) {
16                 if (n % i == 0) {
17                     isPrime = false;
18                     break;
19                 }
20             }
21
22         }
23
24
25         if(isPrime)
26             System.out.println("The number is a prime number");
27         else
28             System.out.println("The number is not a prime number");
```

Q4. Sum of first 10 number

module-info.java | FirstClass.java | leapYear.java | primeNumber.java | loop.java | switchCase.java

```
1  package tutorial1;
2
3  public class loop {
4
5      public static void main(String[] args) {
6          // TODO Auto-generated method stub
7          int sum = 0;
8          int n= 10;
9          for(int i=1;i<=10;i++)
10         {
11             sum+=i;
12         }
13
14
15         System.out.println("The sum of first " + n + " natural numbers is " + sum);
16     }
17
18 }
19
```

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```
<terminated> loop [Java Application] X:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116
The sum of first 10 natural numbers is 55
```

Q5. Switch Case

module-info.java | FirstClass.java | leapYear.java | primeNumber.java | loop.java | switchCase.java

```java
package tutorial1;

public class switchCase {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        String weather = "Rainy";

        switch(weather)
        {
            case "Sunny":
                System.out.println("You can go out to play");
                break;

            case "Rainy":
                System.out.println("You cannot go out to play");
                break;

            default:
                System.out.println("We will see later");
        }



    }

}

```

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<terminated> switchCase [Java Application] X:\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116

```
You cannot go out to play
```