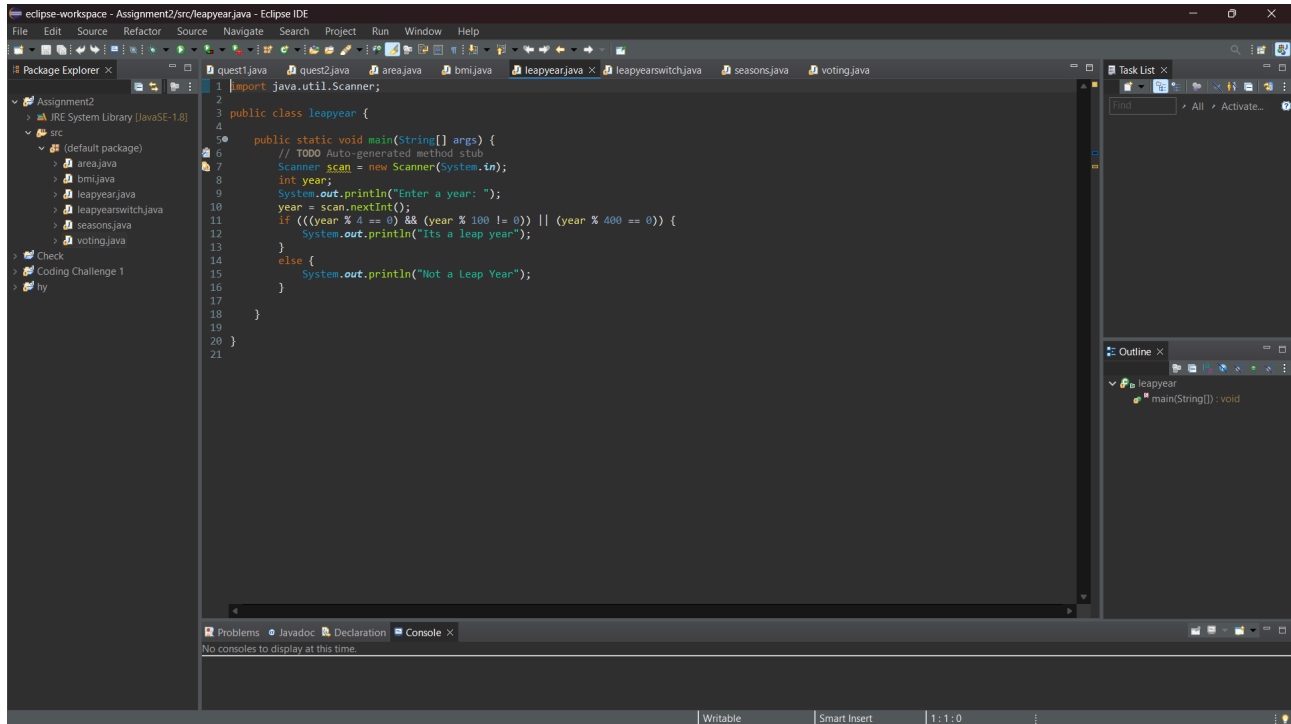


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1)Write a program that checks if a given year is a leap year or not using both if-else and switch-case.

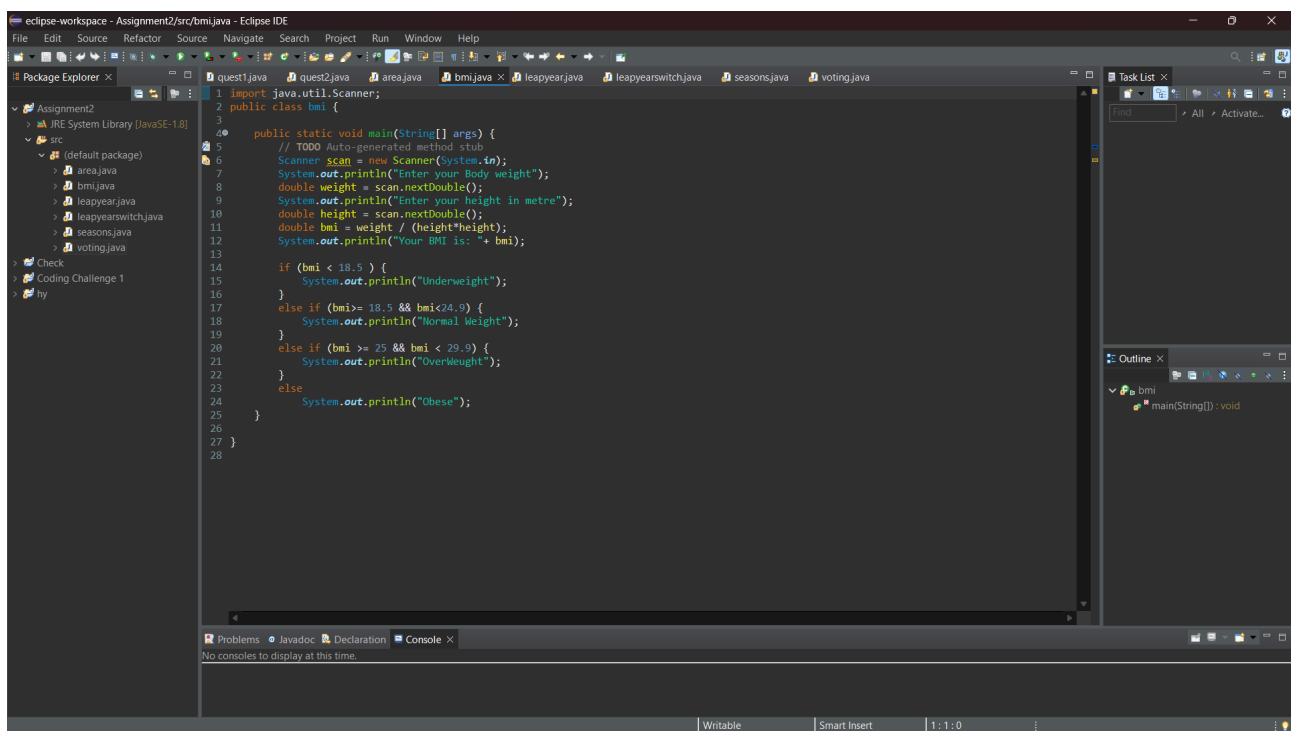


The screenshot shows the Eclipse IDE with a Java project named 'Assignment2'. The 'src' folder contains several files, including 'leapyear.java'. The code in 'leapyear.java' is as follows:

```
1 import java.util.Scanner;
2
3 public class leapyear {
4
5     public static void main(String[] args) {
6         // TODO Auto-generated method stub
7         Scanner scan = new Scanner(System.in);
8         int year;
9         System.out.println("Enter a year: ");
10        year = scan.nextInt();
11        if (((year % 4 == 0) && (year % 100 != 0)) || (year % 400 == 0)) {
12            System.out.println("Its a leap year");
13        }
14        else {
15            System.out.println("Not a Leap Year");
16        }
17    }
18 }
19
20 }
21
```

The IDE interface includes a Package Explorer on the left, a Task List on the right, and a Console at the bottom showing 'No consoles to display at this time.'

2)Implement a program that calculates the Body Mass Index (BMI) based on height and weight input using if-else to classify the BMI int categories (underweight, normal weight, overweight,etc).

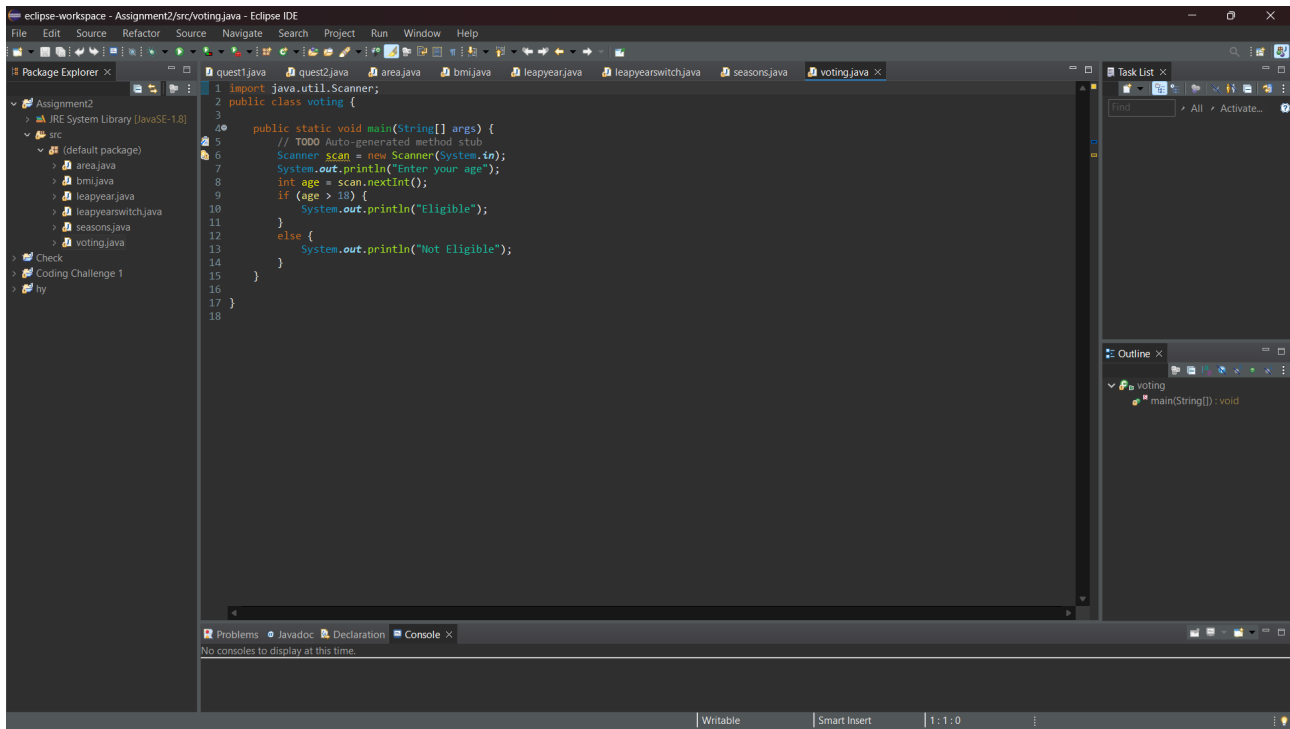


The screenshot shows the Eclipse IDE with a Java project named 'Assignment2'. The 'src' folder contains several files, including 'bmi.java'. The code in 'bmi.java' is as follows:

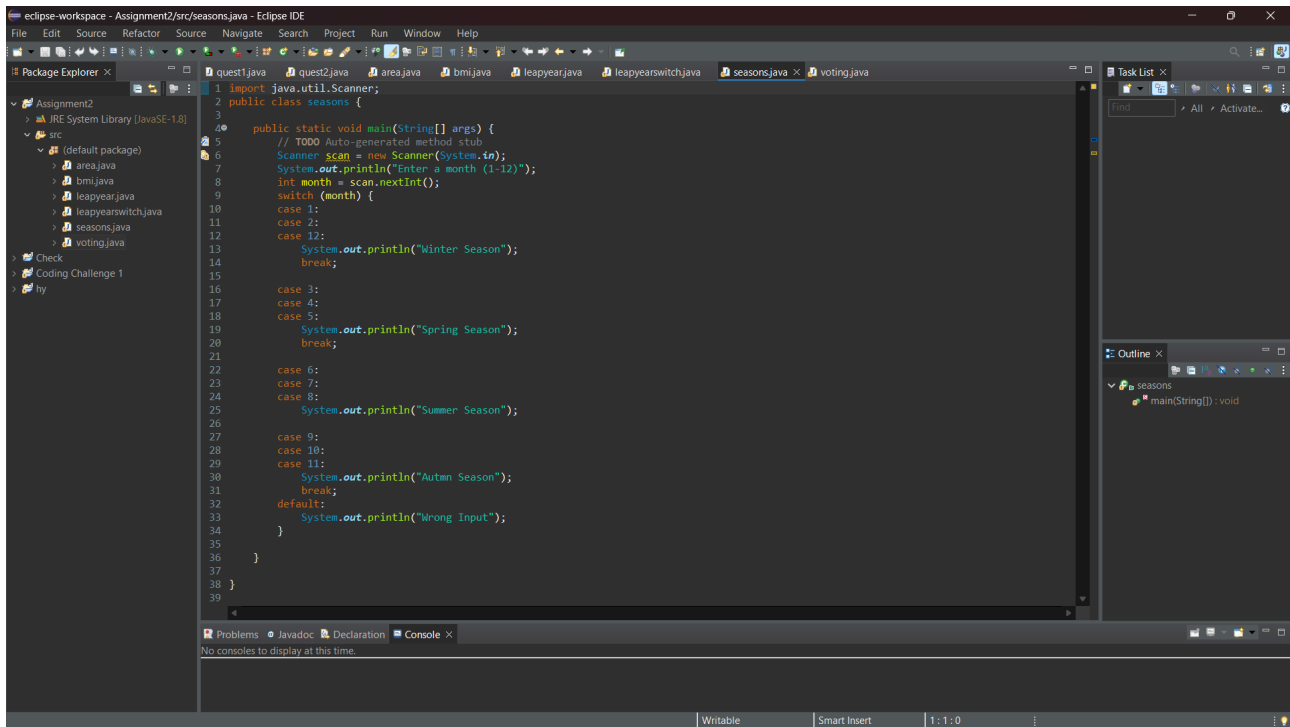
```
1 import java.util.Scanner;
2 public class bmi {
3
4     public static void main(String[] args) {
5         // TODO Auto-generated method stub
6         Scanner scan = new Scanner(System.in);
7         System.out.println("Enter your Body weight");
8         double weight = scan.nextDouble();
9         System.out.println("Enter your height in metre");
10        double height = scan.nextDouble();
11        double bmi = weight / (height*height);
12        System.out.println("Your BMI is: " + bmi);
13
14        if (bmi < 18.5) {
15            System.out.println("Underweight");
16        }
17        else if (bmi >= 18.5 && bmi < 24.9) {
18            System.out.println("Normal Weight");
19        }
20        else if (bmi >= 25 && bmi < 29.9) {
21            System.out.println("OverMeught");
22        }
23        else {
24            System.out.println("Obese");
25        }
26    }
27 }
28
```

The IDE interface includes a Package Explorer on the left, a Task List on the right, and a Console at the bottom showing 'No consoles to display at this time.'

3)Write a program that checks if a person is eligible to vote based on their age.



4) Write a program that takes a month (1-12) and prints the corresponding season (Winter, Spring, Summer, Autumn) using a switch case



5) Write a program that allows the user to select a shape (Circle, Square, Rectangle, Triangle) and then calculates the area based on user-provided dimensions using a switch case.

