Class Practice: While loop

1- The following program should read in a number from the user and then sum up all the numbers between 0 and the number the user entered (inclusive) and print out the result. For example, if the user entered 5, the program should sum up the numbers 0, 1, 2, 3, 4 and 5 and print out the sum of 15. If the user entered 2, the program would sum up 0, 1 and 2 and print the sum of 2.

```java
import java.util.Scanner;
public class SumUp {
    public static void main(String args[]) {
        Scanner in = new Scanner(System.in);
        int limit = in.nextInt();

        // Creating all the numbers and adding them
        int i = 0;
        int sum = 0;
        while(i <= limit) {
            sum = sum + i;
            i = i + 1;
        }

        System.out.println("Sum is " + sum);
    }
}
```
2 - Try to rewrite the same program, this time sum up all the even numbers between 0 and the number the user entered (inclusive) and print out the result. For example, if the user entered 10, the program should sum up the numbers 0, 2, 4, 6, 8, and 10 and print out the sum of 30. If the user entered 7, the program would sum up 0, 2, 4, and 6 and print the sum of 12.

//Solution1
import java.util.Scanner;
public class SumUpEven {
    public static void main(String args[]) {
        Scanner in = new Scanner(System.in);
        int limit = in.nextInt();

        //Creating all numbers and adding the even numbers
        int i = 0;
        int sum = 0;
        while(i <= limit){
            if(i % 2 == 0){
                sum = sum + i;
            }
            i = i + 1;
        }

        System.out.println("Sum is " + sum);
    }
}

//Solution2
import java.util.Scanner;
public class SumUpEven {
    public static void main(String args[]) {
        Scanner in = new Scanner(System.in);
        int limit = in.nextInt();

        //Creating just even numbers and adding them
        int i = 0;
        int sum = 0;
        while(i <= limit){
            sum = sum + i;
            i = i + 2;
        }

        System.out.println("Sum is " + sum);
    }
}