Bonus point assignment – week 2

Create a java program that accepts user input and presents a menu with options.

1. Is number odd?
2. Is number a power of 2?
3. Two's complement of number?

Implement the methods by using the bitwise operators you have just learned.

Organize your source code in a readable manner with the use of control flow and methods.

Paste source code here, with a screenshot of a working application.

```java
public static void main(String[] args) {
    int number = 5;
    System.out.println(number);
    oddOrEven(number);
    powerOff2(number);
    twoComplement(number);
    System.out.println();
    number = 8;
    System.out.println(number);
    oddOrEven(number);
    powerOff2(number);
    twoComplement(number);
}

public static void oddOrEven(int number) {
    if ((number & 1) == 1) {
        System.out.println("Number is odd");
    } else {
        System.out.println("Number is even");
    }
}

public static void powerOff2(int number) {
    if ((number & (number - 1)) == 0) {
        System.out.println("Number is a power of 2");
    } else {
        System.out.println("Number isn't a power of 2");
    }
}

public static void twoComplement(int number) {
    int x = ~number + 1;
    System.out.println("Two complement of five (to negative): " + x);
    int y = ~x + 1;
    System.out.println("Again two complement of the negative five (to
positive): " + y);
}
```

```
5
Number is odd
Number isn't a power of 2
Two complement of five (to negative): -5
Again two complement of the negative five (to positive): 5

8
Number is even
Number is a power of 2
Two complement of five (to negative): -8
Again two complement of the negative five (to positive): 8

Process finished with exit code 0
```