Exercises: 3, 6, 8, 12, and 34; Web exercises: 11, 15, 50, 51, 53, and 56.

Ex 3 What (if anything) is wrong with each of the following statements?

a. `if (a > b) then c = 0;`
b. `if a > b { c = 0; }`
c. `if (a > b) c = 0;`
d. `if (a > b) c = 0 else b = 0;`

R. a, b, c are wrong

ex 6: Suppose that `i` and `j` are both of type `int`. What is the value of `j` after each of the following statements is executed?

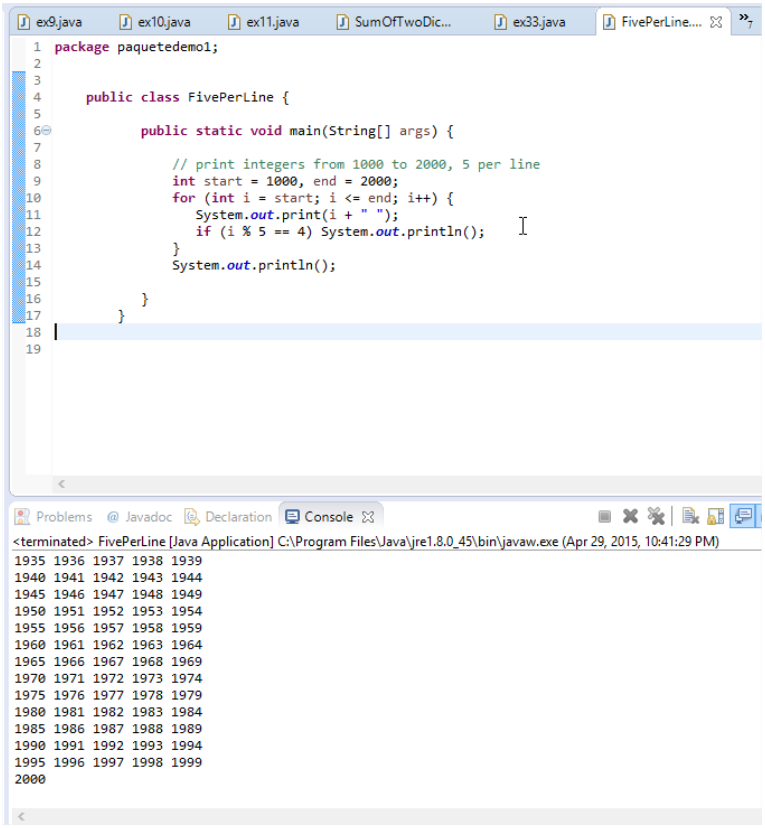
a. `for (i = 0, j = 0; i < 10; i++) j += i;`
b. `for (i = 0, j = 1; i < 10; i++) j += j;`
c. `for (j = 0; j < 10; j++) j += j;`
d. `for (i = 0, j = 0; i < 10; i++) j += j++;`

R.
i – j a
0 - 0
1 - 1
2 - 3
3 - 6
4 - 10
5 - 15
6 - 21
7 - 28
8 - 36
9 - 45

i - j b
0 - 2
1 - 4
2 - 8
3 - 16
4 - 32
5 - 64
6 - 128
7 - 256
8 - 512
9 - 1024

```
i - j  c
10 - 0
10 - 2
10 - 6
10 - 14
 -
i - j  d
0 - 0
1 - 0
2 - 0
3 - 0
4 - 0
5 - 0
6 - 0
7 - 0
8 - 0
9 - 0
```

Ex8 Write a program FivePerLine.java that, using one `for` loop and one `if` statement, prints the integers from 1000 to 2000 with five integers per line. *Hint*: use the `%` operator.



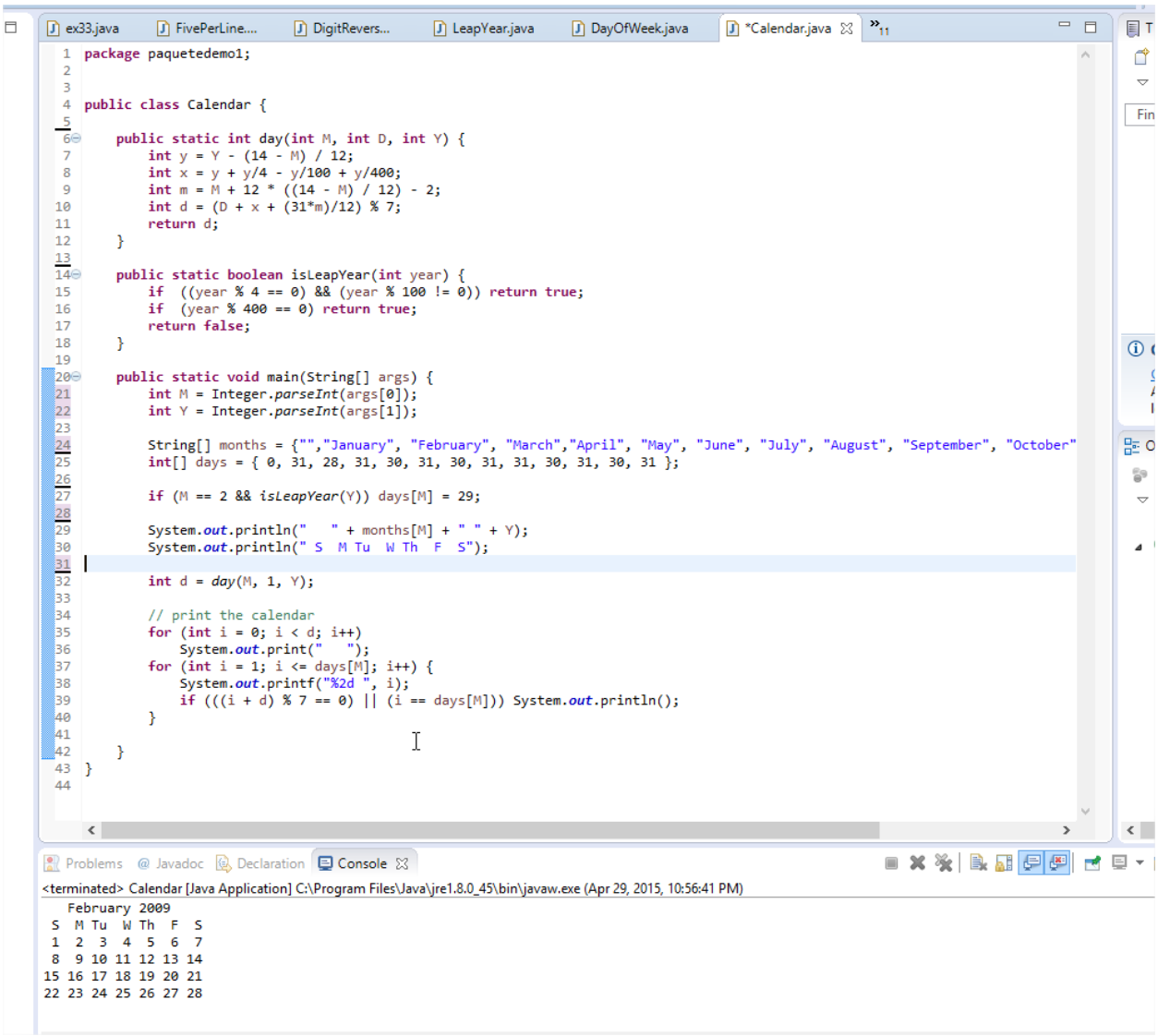
1. Ex 12 What is the value of `m` and `n` after executing the following code?

```
int n = 123456789;
int m = 0;
while (n != 0) {
```

```
        m = (10 * m) + (n % 10);
        n = n / 10;
    }
```

R. 987654321

Ex 34 **Calendar.** Write a program `Calendar` that takes two command line arguments `m` and `y` and prints out the monthly calendar for the `m`th month of year `y`. For example, your output for `Calendar 2 2009` should be



Web

1. Ex 11 What is wrong with the following code fragment?

```
double x = -32.2;
boolean isPositive = (x > 0);
if (isPositive = true) System.out.println(x + " is positive");
else                   System.out.println(x + " is not positive");
```

R. The condition into if require change = to ==

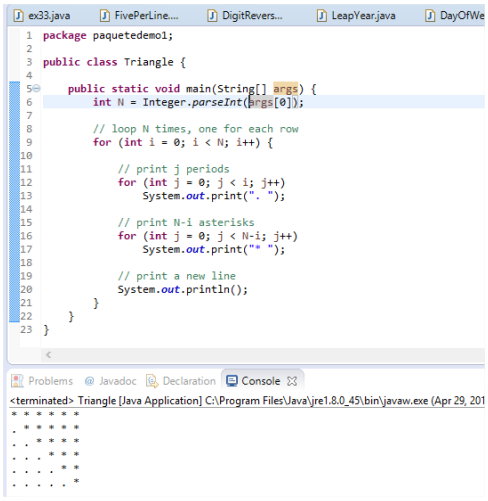
Ex 15What does the following program do?

```
public static void main(String[] args) {
   int N = Integer.parseInt(args[0]);
   int x = 1;
   while (N >= 1) {
      System.out.println(x);
      x = 2 * x;
      N = N / 2;
   }
}
```

Increase * 2 the value while this are low than initial value setter

Example N = 50 result 1 2 4 8 16 32.

Ex 50 Write a program Triangle.java that takes a command-line argument N and prints an N-by-N triangular pattern like the one below.



Ex 51 Write a program Ex.java that takes a command-line argument N and prints a (2N + 1)-by-(2N + 1) ex like the one below. Use two `for` loops and one `if-else` statement.

```
1  package paquetedemo1;
2
3  public class Ex {
4
5      public static void main(String[] args) {
6          int N =6;
7
8          for (int i = -N; i <= N; i++) {
9              for (int j = -N; j <= N; j++) {
10                 if ((i == -j) || (i == j)) System.out.print("* ");
11                 else                       System.out.print(". ");
12             }
13             System.out.println();
14         }
15     }
16 }
```

Problems @ Javadoc Declaration Console

<terminated> Ex [Java Application] C:\Program Files\Java\jre1.8.0_45\bin\javaw.exe (Apr 29, 2015, 11:11:25 PM)

```
* . . . . . . . . . . . *
. * . . . . . . . . . * .
. . * . . . . . . . * . .
. . . * . . . . . * . . .
. . . . * . . . * . . . .
. . . . . * . * . . . . .
. . . . . . * . . . . . .
. . . . . * . * . . . . .
. . . . * . . . * . . . .
. . . * . . . . . * . . .
. . * . . . . . . . * . .
. * . . . . . . . . . * .
* . . . . . . . . . . . *
```

Ex 53 Write a program Diamond.java that takes a command-line argument N and prints a (2N + 1)-by-(2N + 1) diamond like the one below.