

## Think Java - Chapter 7 - Exercise 1

1. Draw a table that shows the value of the variables *i* and *n* during the execution of loop. The table should contain one column for each variable and one line for each iteration.

n=	10	10	10	10	10	10	10
i=	10	5	6	3	4	2	1

2. What is the output of this program?

```
10
5
6
3
4
2
```

3. Can you prove that this loop terminates for any positive value of *n*?

The while loop states that it will run while *i* is greater than one. Any positive value after being continually divided by two which will always end up eventually being 1, which will terminate the loop.