# Java Basics – Debugging

The goal of this lab is to practice **debugging techniques** in scenarios where a piece of code does not work correctly. Your task is to pinpoint the bug and fix it (without rewriting the entire code).

## Bit Carousel

You are given a number **n**, a **number of shifts** and **directions**. The program should shift the bits in a table with **6 cells**. The shifting should move all bits **1 position** to the given direction (either "**left**" or "**right**").

For example we are given the number **17** and two times shift to "right".

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 5 | 4 | 3 | 2 | 1 | 0 |  | 5 | 4 | 3 | 2 | 1 | 0 |  | 5 | 4 | 3 | 2 | 1 | 0 |
| 0 | 1 | 0 | 0 | 0 | 1 | [U+2192.svg](http://en.wikipedia.org/wiki/File:U+2192.svg) | 1 | 0 | 1 | 0 | 0 | 0 | [U+2192.svg](http://en.wikipedia.org/wiki/File:U+2192.svg) | 0 | 1 | 0 | 1 | 0 | 0 |

Note: If a bit goes exits the table, it should start over from the other end.

The result is **20**.

### Output

The **resulting number** (after all shifting is done) should be printed on the console.

### Constraints

* The number **n** will be in the range [0 ... 63].

### Tests

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Input** | **Program Output** | **Expected Output** |  | **Input** | **Program Output** | **Expected Output** |
| 32  2  right  right | 32 | 8 |  | 59  4  left  left  left  left | 59 | 62 |
| 63  1  left | 63 | 63 |  | 45  3  left  right  left | 45 | 27 |