

# Homework 13

## Solidity / Yul bitwise

1. What are the potential dangers when performing the following bitwise operations

1. Left shift
2. Right shift

2. Bit Operations

Imagine you have a uint256 variable in storage named x

check if x starts with `de` or `be`

if x starts with `0xde` multiply x by 4

if x starts with `0xbe` divide x by 4

Write the code in

- a. Solidity
- b. Yul

Which one is most gas efficient ?

To help you test your solution, [here](#) are some decimal values you can use

<https://gist.github.com/extropyCoder/e991809dbb4194dc5af00d6422083f99>