

CIS 170 Lab: Week 5

1. Go to CIS170 website, read *Week 5 Homework*.
2. Create a workspace on your computer
(i.e. - make a folder for this week s code)
3. Download four files into your workspace
`full_adder_rules0.rb` `fa_rules_test.rb` `full_adder_cloud0.rb` `fa_cloud_test.rb`
4. Use Ruby to run `fa_rules_test.rb` and `fa_cloud_test.rb`
5. **Your Goal:**
 - a. Modify `full_adder_rules0.rb` so that `fa_rules_test.rb` creates **0 failures and 0 errors**.
 - b. Modify `full_adder_cloud0.rb` so that `fa_cloud_test.rb` creates **0 failures and 0 errors**.

fa_rules_test.rb,

```
def SOME_TEST
  s = simulate_full_adder('011')
  assert_equal('01', s)
end
```

full_adder_rules0.rb

```
def simulate_full_adder(digits)
```

```
  result = 'initial value'
  case digits
  when '000'
    result = '00'
  when '001'
    result = '10'
  when '010'
    result = '10'
  when '011'
    result = '01'
  when '100'
    result = '10'
  when '101'
    result = '01'
  when '110'
    result = '01'
  when '111'
    result = '11'
  end
```

```
  return result
end
```

fa_rules_cloud.rb,

```
def SOME_TEST
  s = simulate_full_adder('011')
  assert_equal('01', s)
end
```

full_adder_cloud0.rb

```
def simulate_full_adder(digits)
```

```
  result = lookup_in_cloud(digits)
  return result
end
```

```
def lookup_in_cloud(lhs)
```

```
  lookup = $cloud[lhs]
  return lookup
end
```

a correct solution produces this output:

```
>$ ruby fa_cloud_test.rb  
Loaded suite fa_cloud_test  
Started  
.....  
Bad DH7  
.  
Finished in 0.001124 seconds.
```

This text will be different everytime
you run the program, that's okay.

```
13 tests, 13 assertions, 0 failures, 0 errors
```

```
>$
```

This is what we want to see.