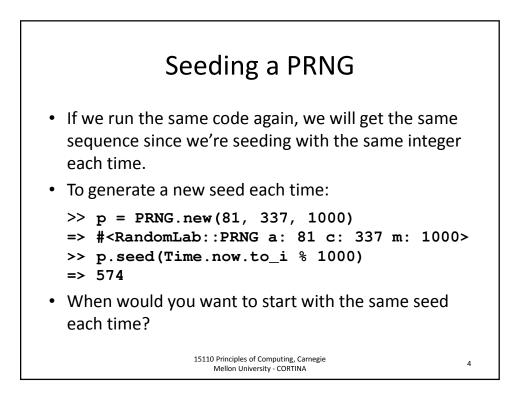
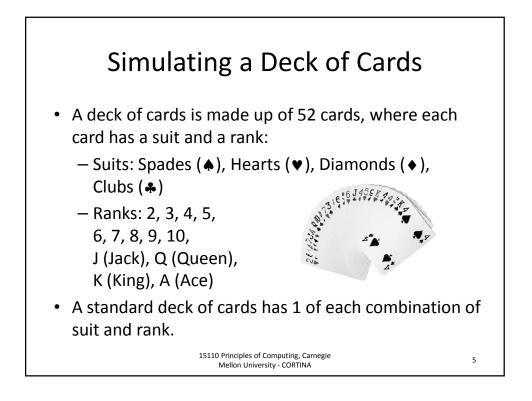
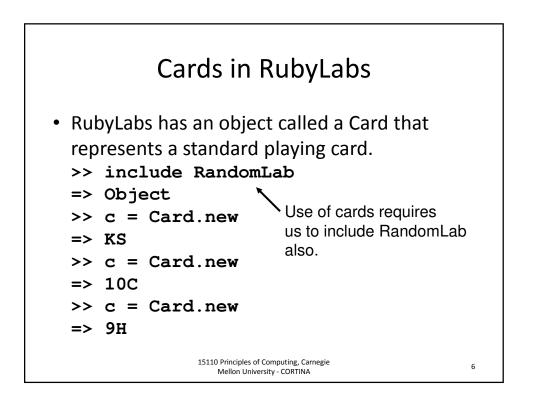


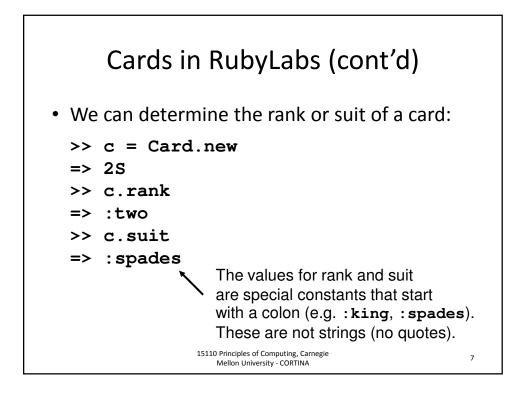
## Using RubyLabs

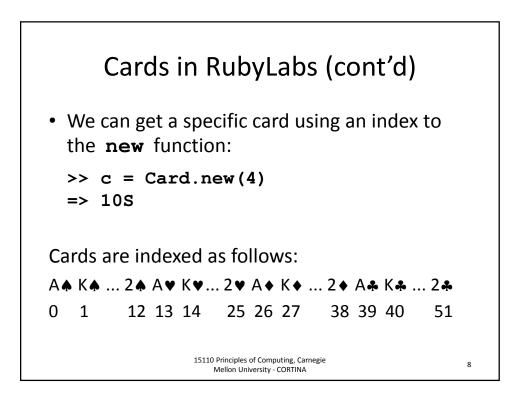
```
>> include RandomLab
=> Object
>> p = PRNG.new(81, 337, 1000)
=> #<RandomLab::PRNG a: 81 c: 337 m: 1000>
>> rolls = []
=> []
>> 10.times { rolls << (p.advance % 6 + 1) }
=> 10
>> rolls
=> [5, 2, 1, 4, 3, 6, 1, 4, 5, 6]
```

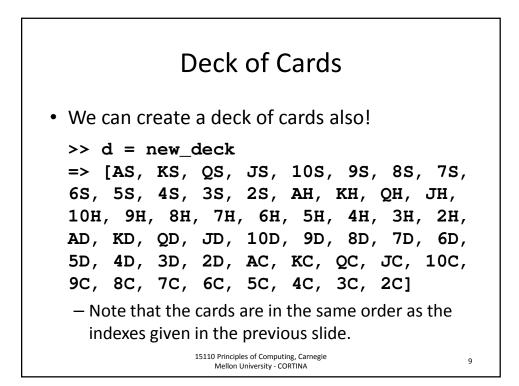


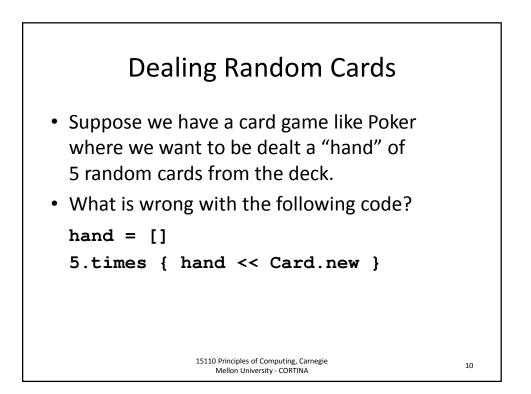




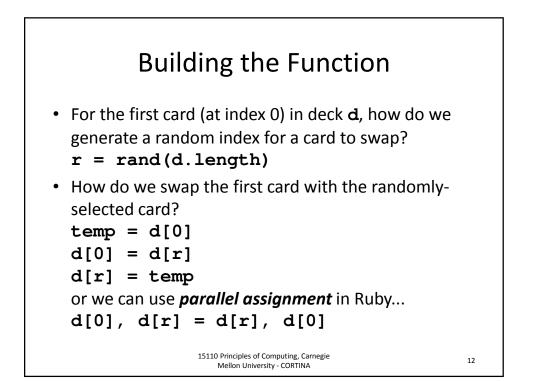


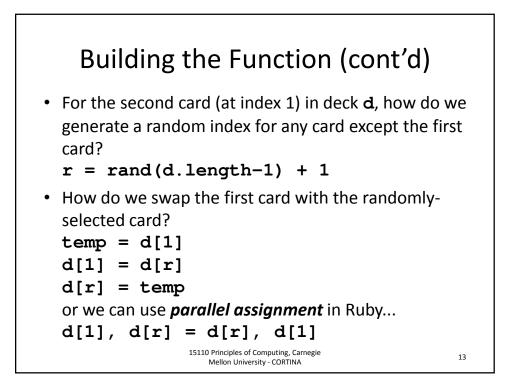


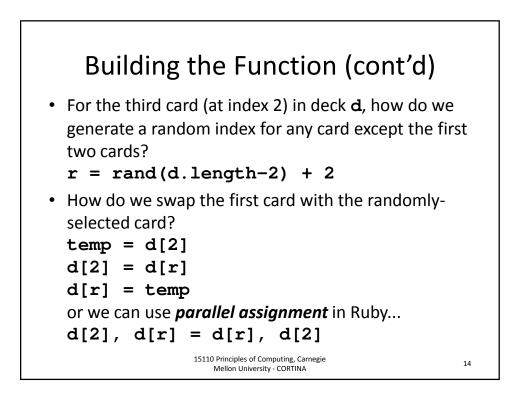


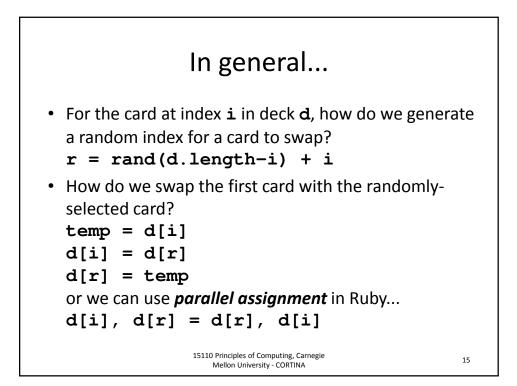








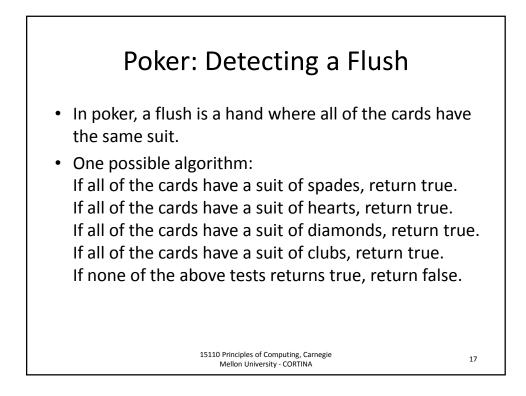


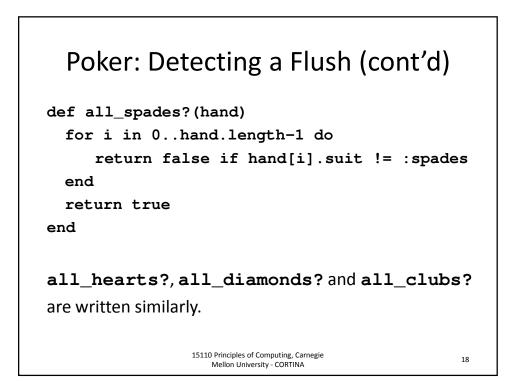


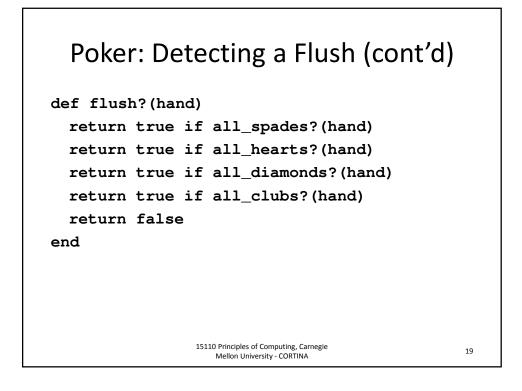
```
Shuffling the entire deck and dealing five cards...

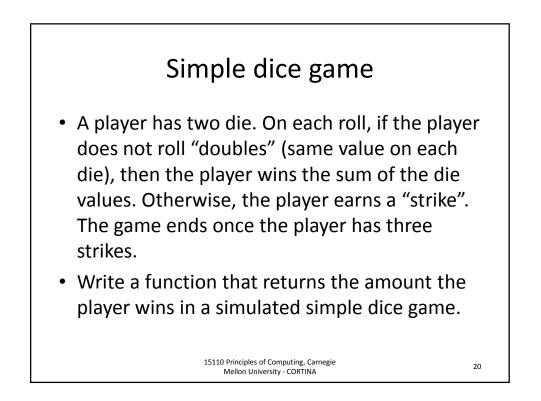
def permute!(d)
    for i in 0..d.length-2 do
        r = rand(d.length-i) + i
        d[i], d[r] = d[r], d[i]
        end
        return d
        end

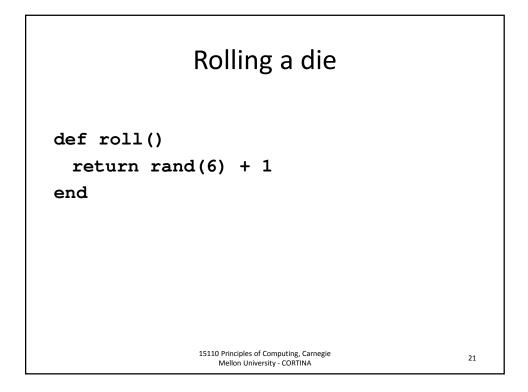
>> hand = permute!(new_deck).first(5)
=> [3H, AD, 3S, 3D, 7D]
```

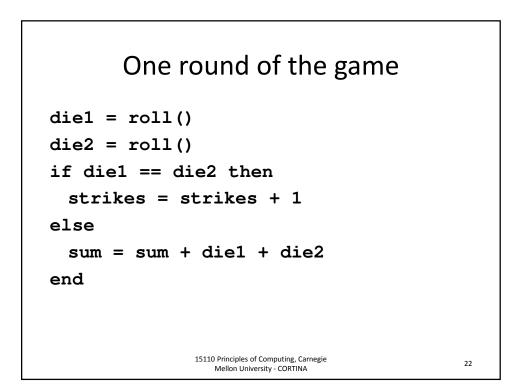


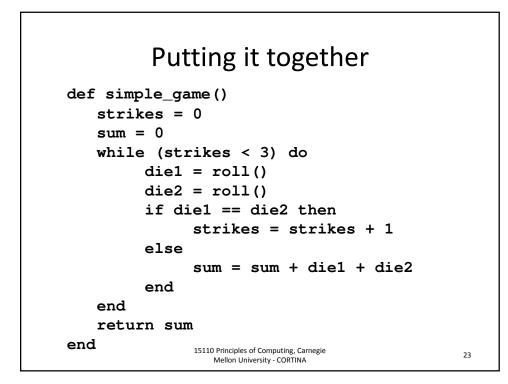












## What is the average winnings for 1000 players of this game?

Mellon University - CORTINA

```
>> games = []
=> []
>> 1000.times { games << simple_game() }
=> 1000
>> games
=> [61, 86, 127, 140, ..., 114, 292]
>> total = 0
=> 0
>> games.each { |score| total += score }
=> [61, 86, 127, 140, ..., 114, 292]
>> total/1000.0
=> 106.731
```

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