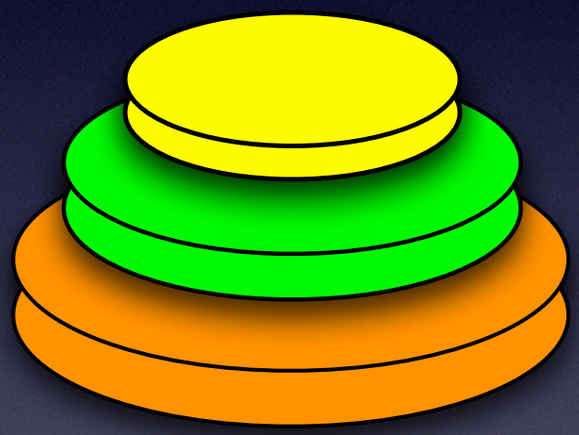
IE.2409
Laboratory Project

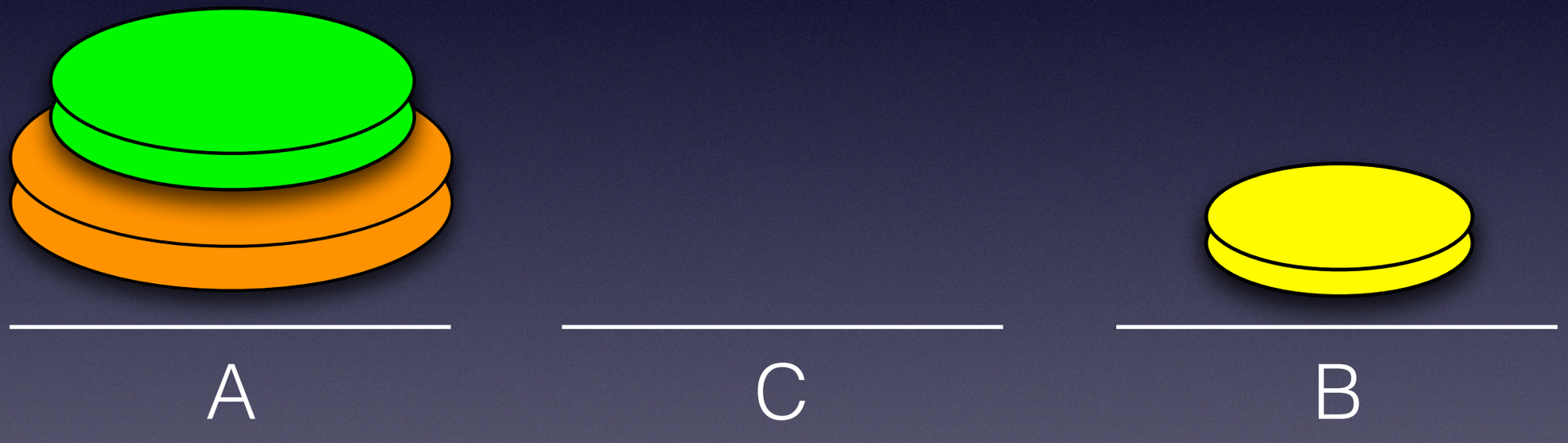
Magnetic Tower of Hanoi

Tower of Hanoi

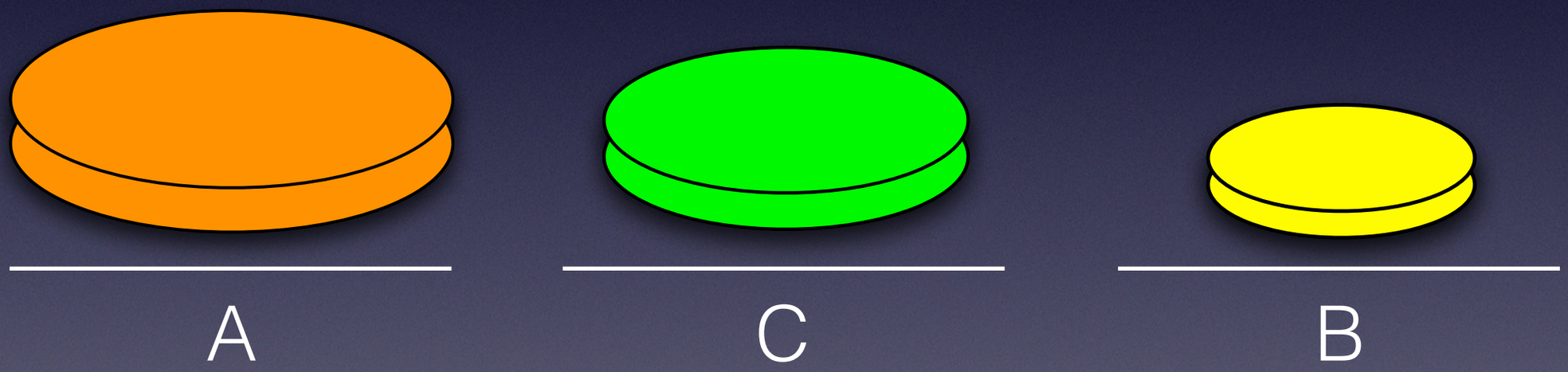


A C B

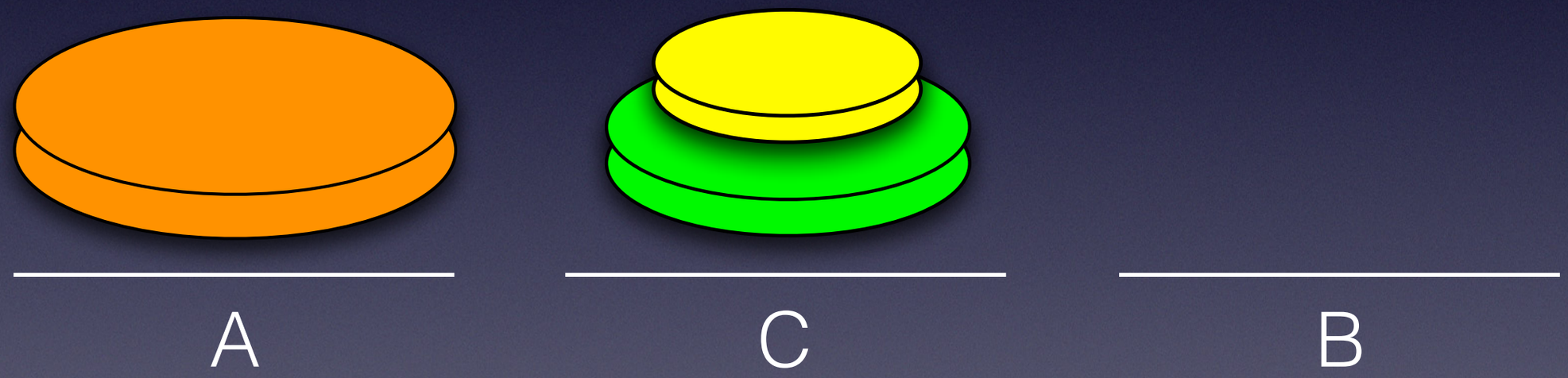
Tower of Hanoi



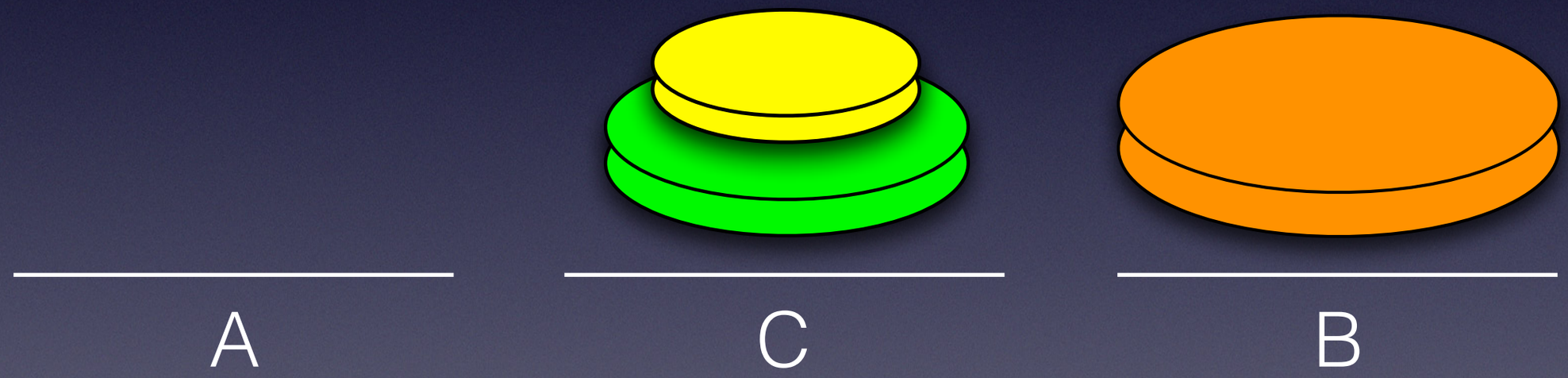
Tower of Hanoi



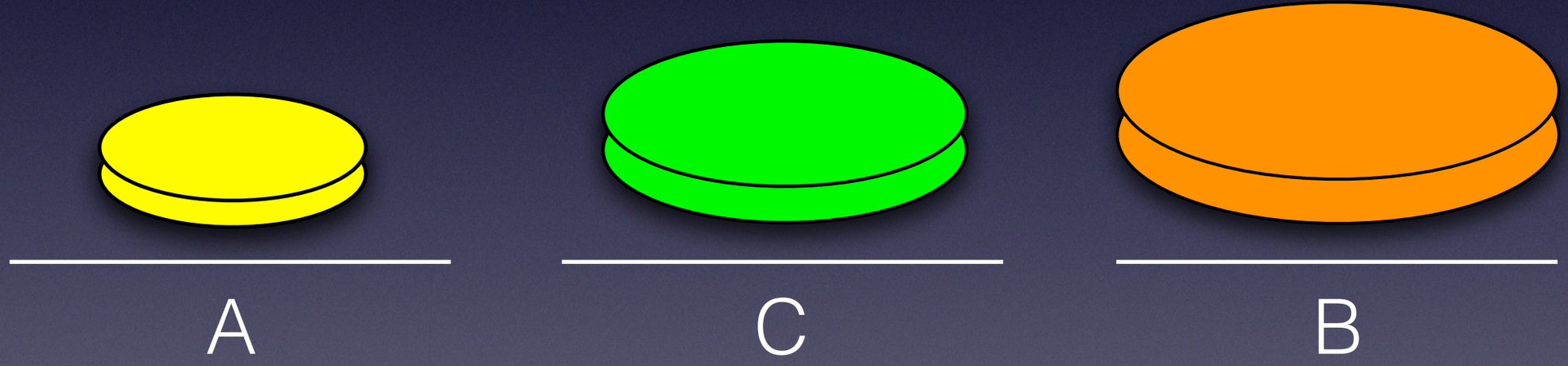
Tower of Hanoi



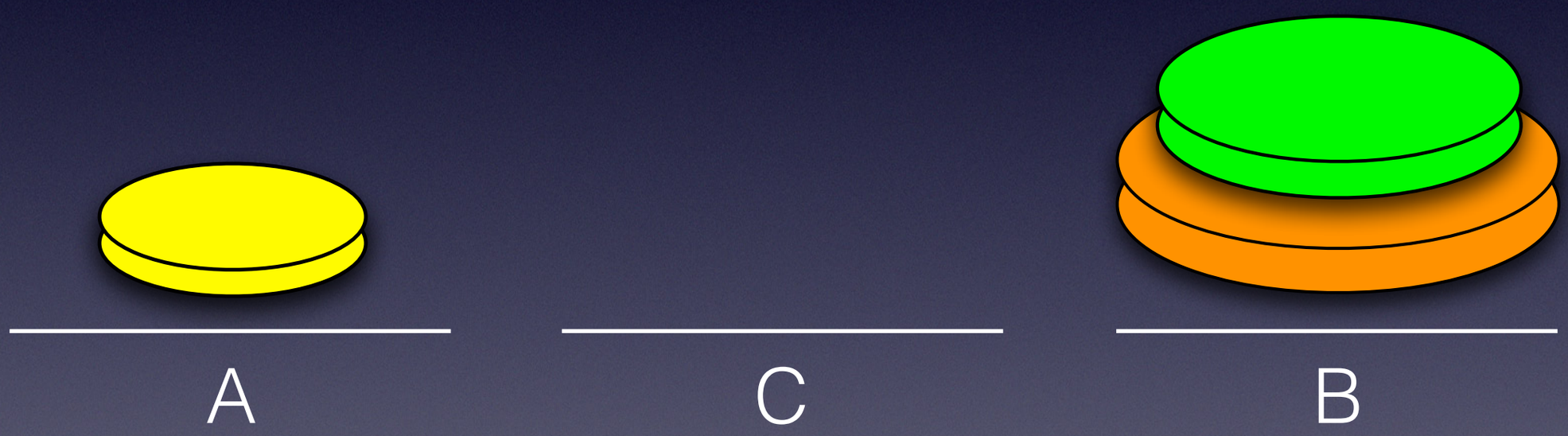
Tower of Hanoi



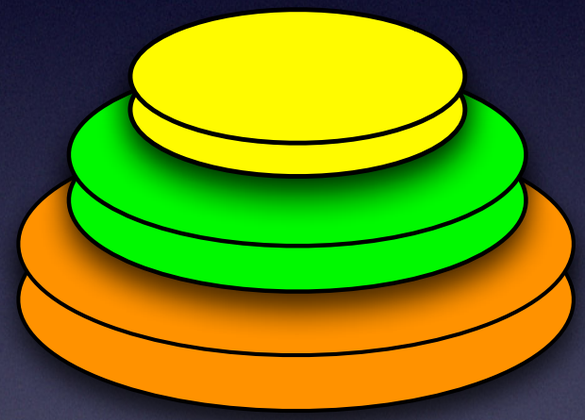
Tower of Hanoi



Tower of Hanoi



Tower of Hanoi



A C B

Moves

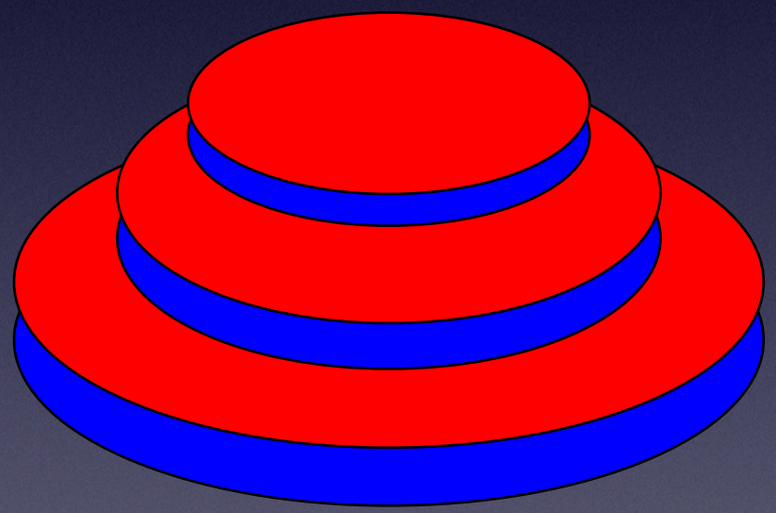
```
hanoi (n – 1, src, tmp)
move (1, src, dst)
hanoi (n – 1, tmp, dst)
```

of Steps

```
hanoi (n) =
    2 * hanoi (n–1) + 1   for n > 1

    1                     for n = 1
```

Magnetic Tower of Hanoi

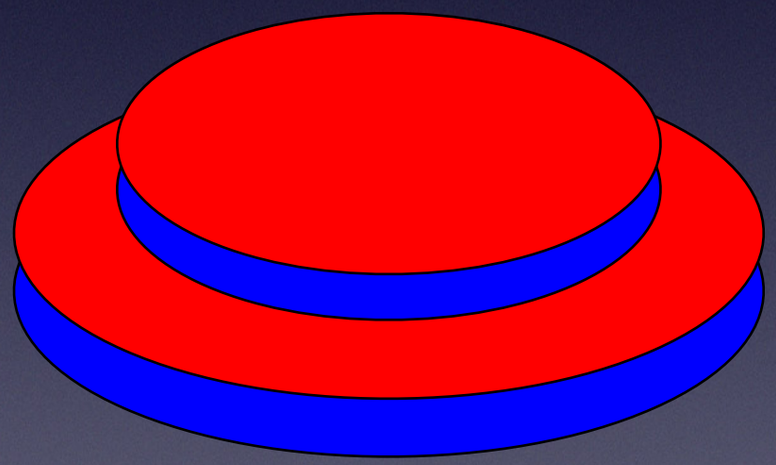


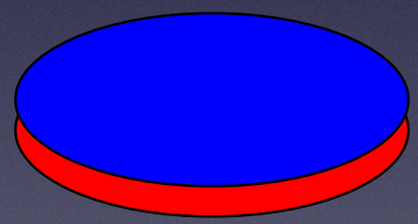
Pile A

Pile B

Pile C (Spare)

Magnetic Tower of Hanoi



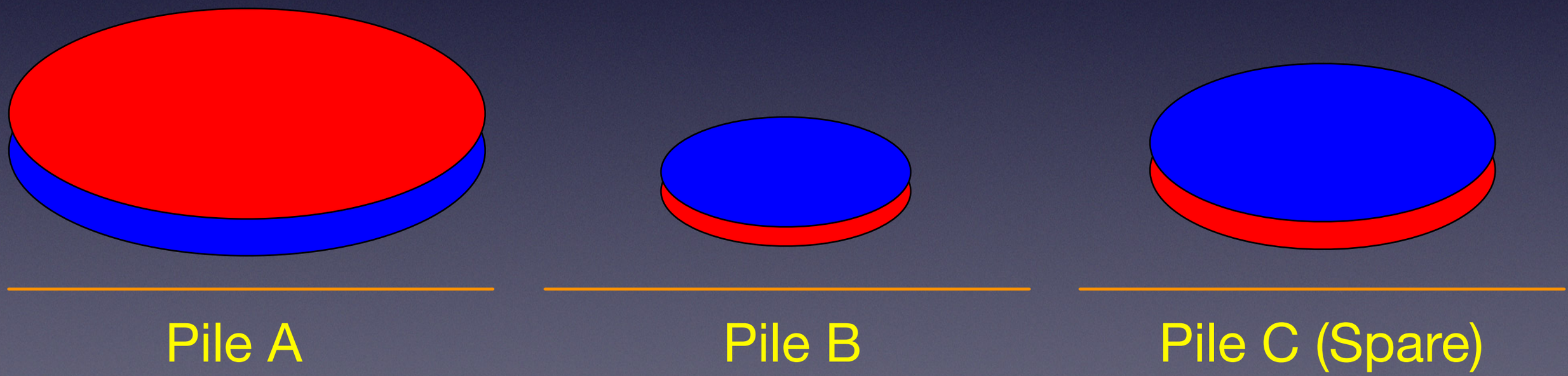


Pile A

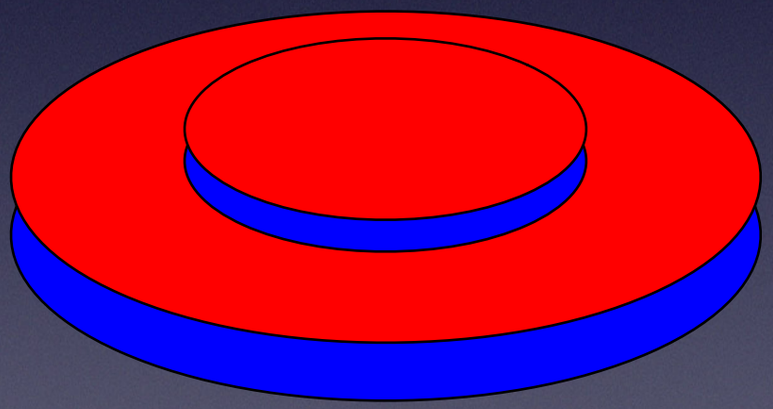
Pile B

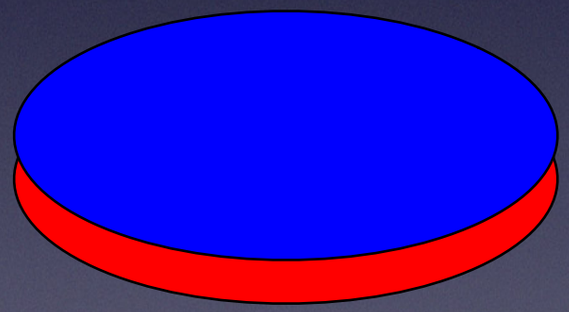
Pile C (Spare)

Magnetic Tower of Hanoi



Magnetic Tower of Hanoi



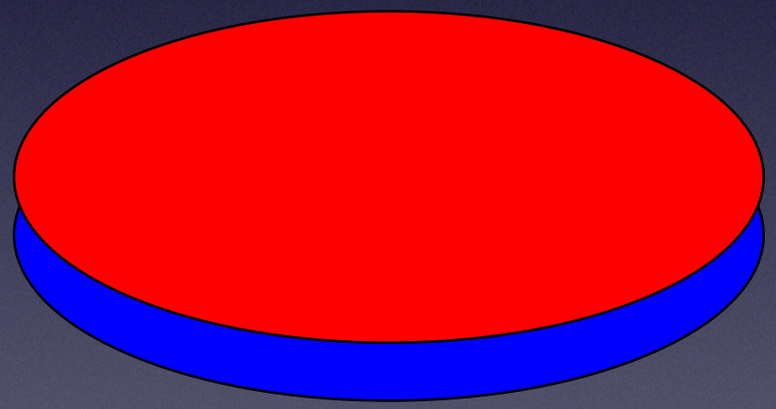


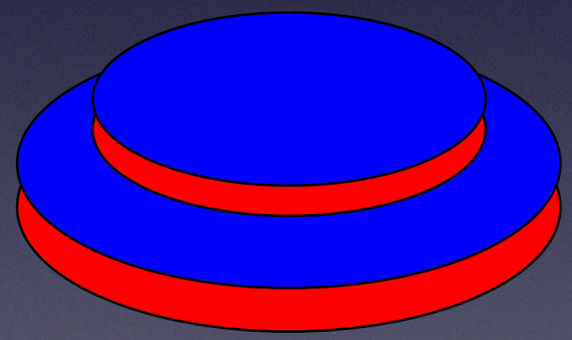
Pile A

Pile B

Pile C (Spare)

Magnetic Tower of Hanoi



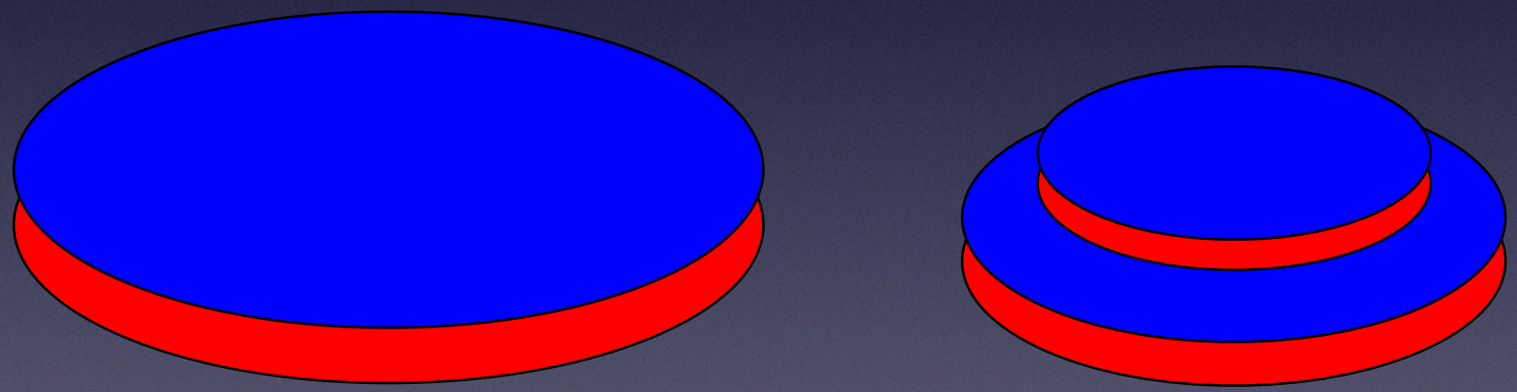


Pile A

Pile B

Pile C (Spare)

Magnetic Tower of Hanoi

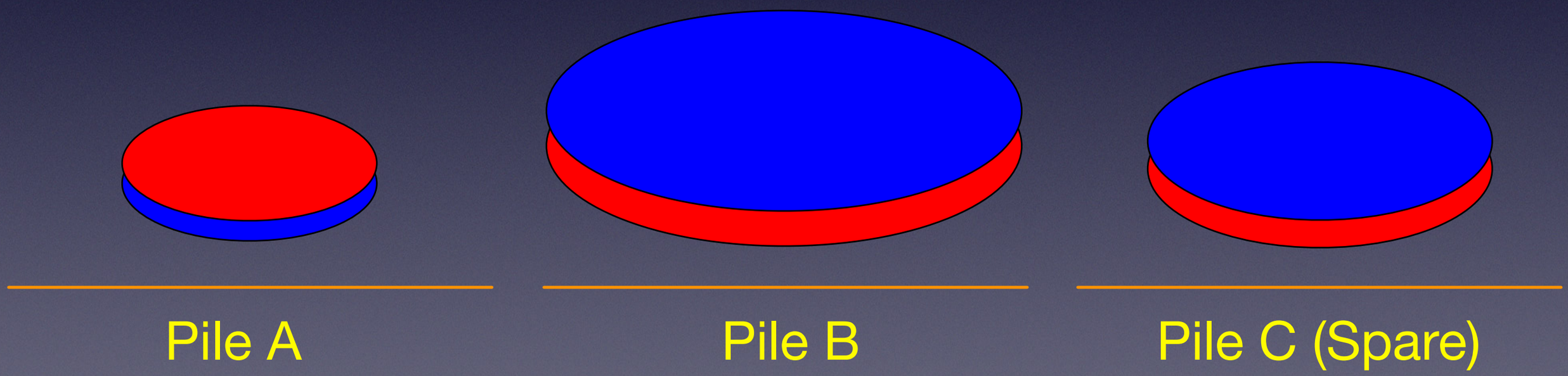


Pile A

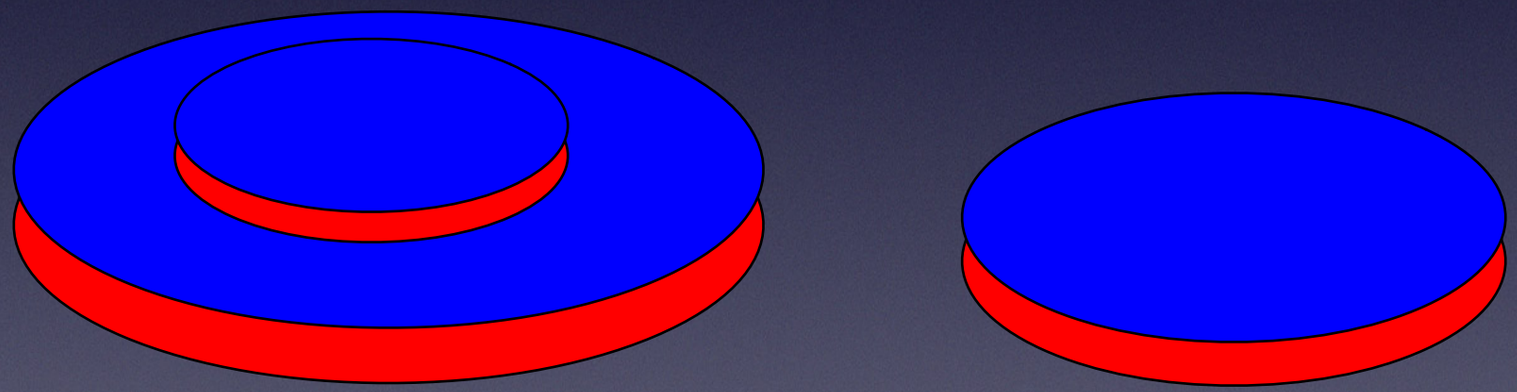
Pile B

Pile C (Spare)

Magnetic Tower of Hanoi



Magnetic Tower of Hanoi

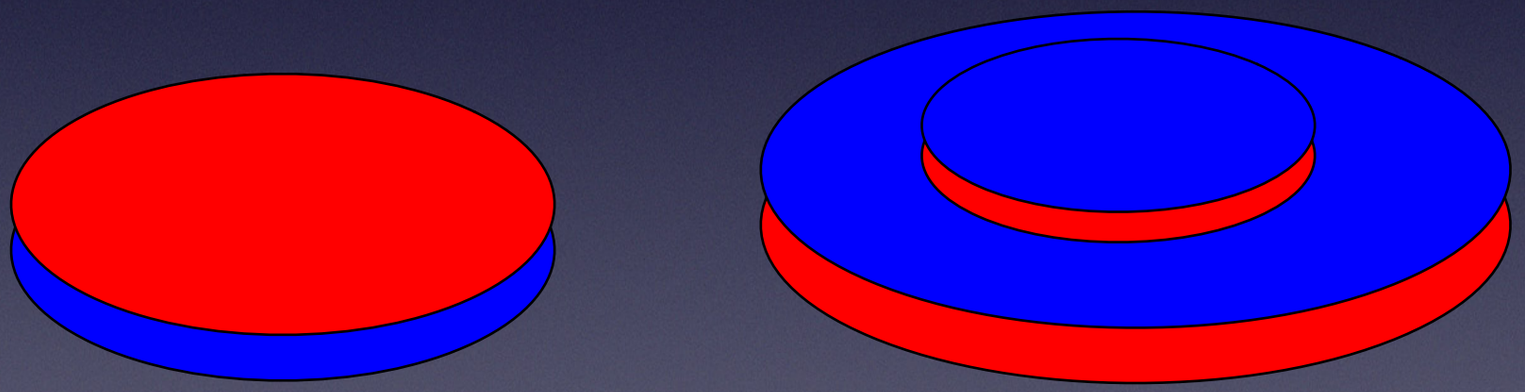


Pile A

Pile B

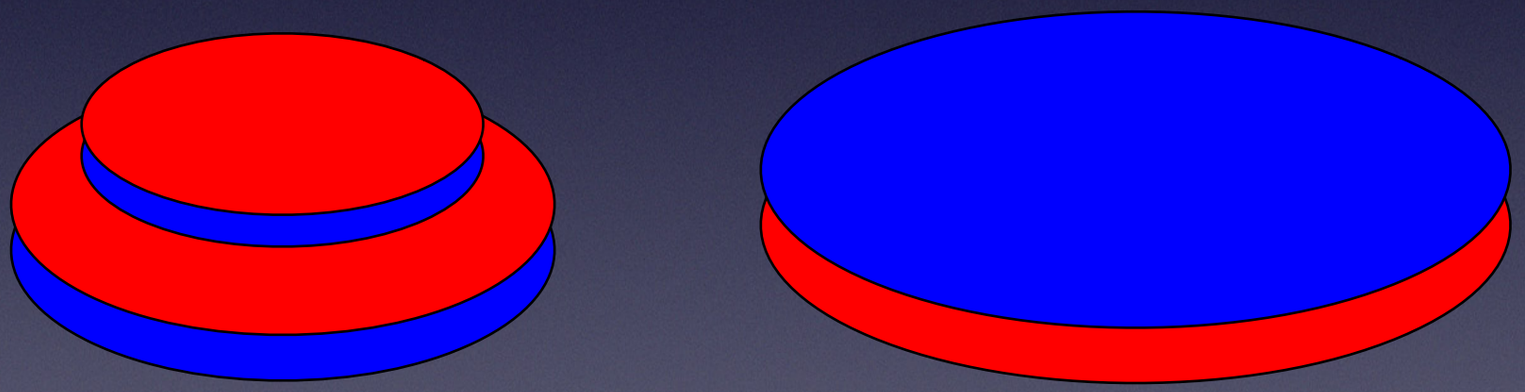
Pile C (Spare)

Magnetic Tower of Hanoi



Pile A | Pile B | Pile C (Spare)

Magnetic Tower of Hanoi

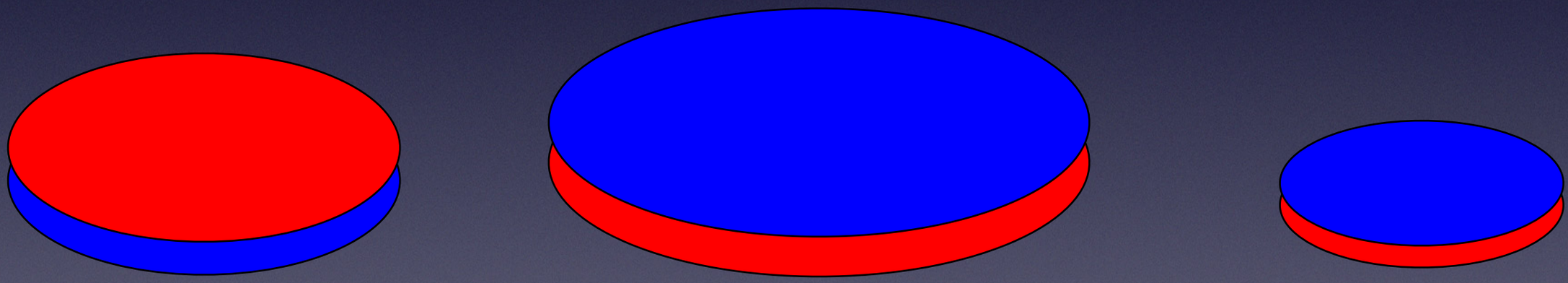


Pile A

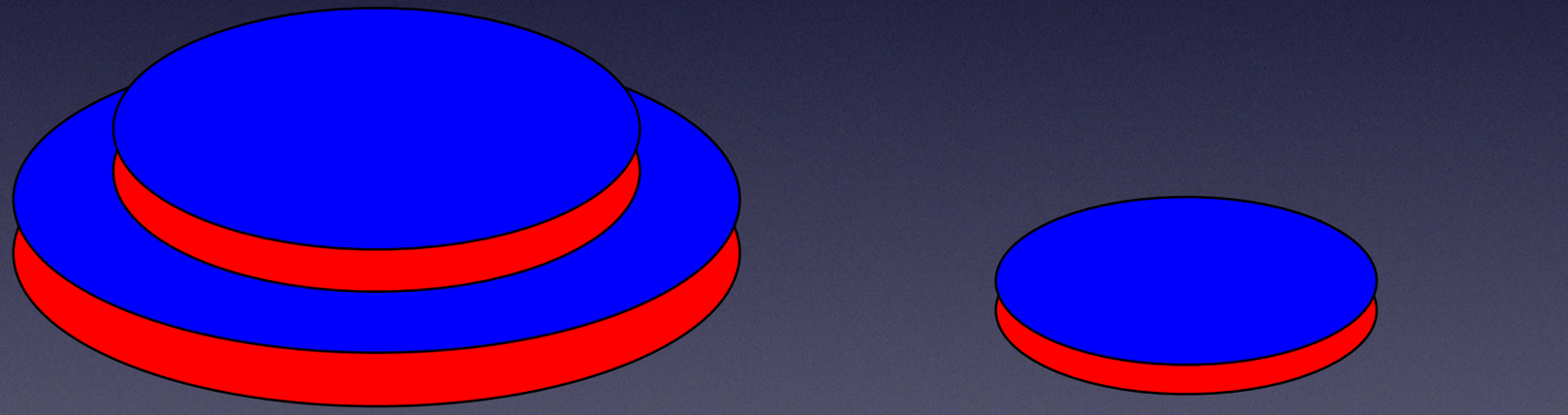
Pile B

Pile C (Spare)

Magnetic Tower of Hanoi



Magnetic Tower of Hanoi

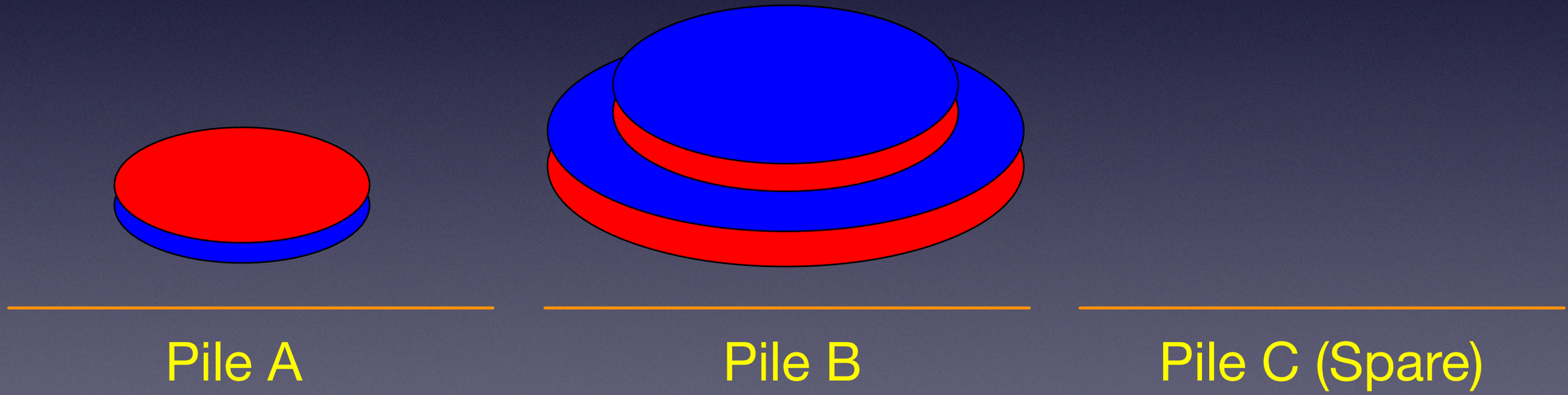


Pile A

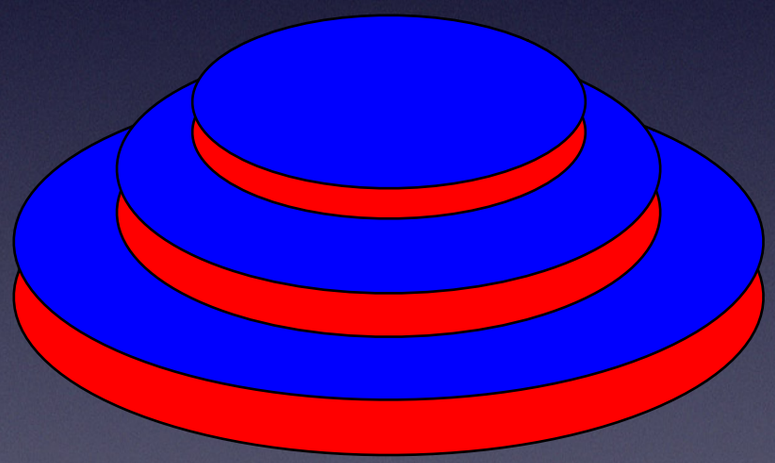
Pile B

Pile C (Spare)

Magnetic Tower of Hanoi



Magnetic Tower of Hanoi



Pile A

Pile B

Pile C (Spare)

(Partial) Algorithm

```
magnetic_hanoi (N, A, B) {
    if n > 1 magnetic_hanoi (N-1, A, C)
    move (1, A, B)
    if n > 1 magnetic_hanoi (N-1, C, A)
    if n > 1 magnetic_hanoi (N-1, A, B)
}
```