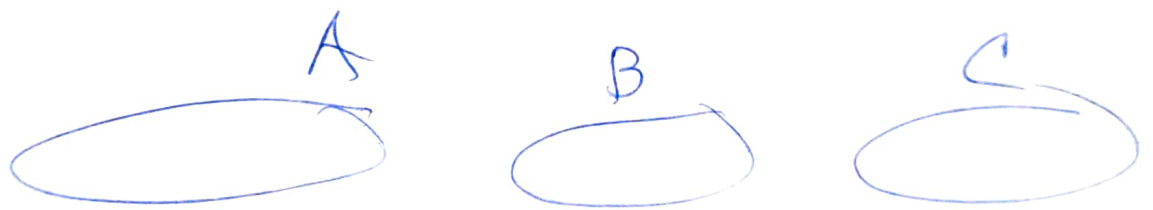There are 3^n coins.

One of the coin has _less_

weight than all other coins.

Thus $3^n - 1$ coins have identical

weight ___

Here is an algorithm to

find the " coin with less weight "

A   B   C

Split in to 3

eaual groups

if $A = B$ then less weight

Coin is in C

if $A < B$ them less weight

Coin is in A

other wise less weight coin is

in B