



2^n bytes on n-bit machines

logical address is what the programs see

physical address is where the data actually reside in

`a' and `b' both select half of the AND gates, but in different patterns

When the selections of `a' and `b' combined, they narrow down and

select only one AND gate

binary "search" can happen simultaneously at gate level

This is what "column based" data bases are

4GB in 32-bit machines

the program has all the memory

The translation removes the need to recompile the program if it uses "absolute addresses" (hard code addresses in)

from "logical address" to "physical address"

the program's address starts from zero

Programs need to process data

How do they refer to the data?

They use *addresses* of data

Reason for paging

We want to create the illusion that ..

thus we do a *translation* 

... but we don't have that much physical memory



used by some old / dead OSes

System/38

Virtual memory Physical (per process) memory