

CS143 Homework #5

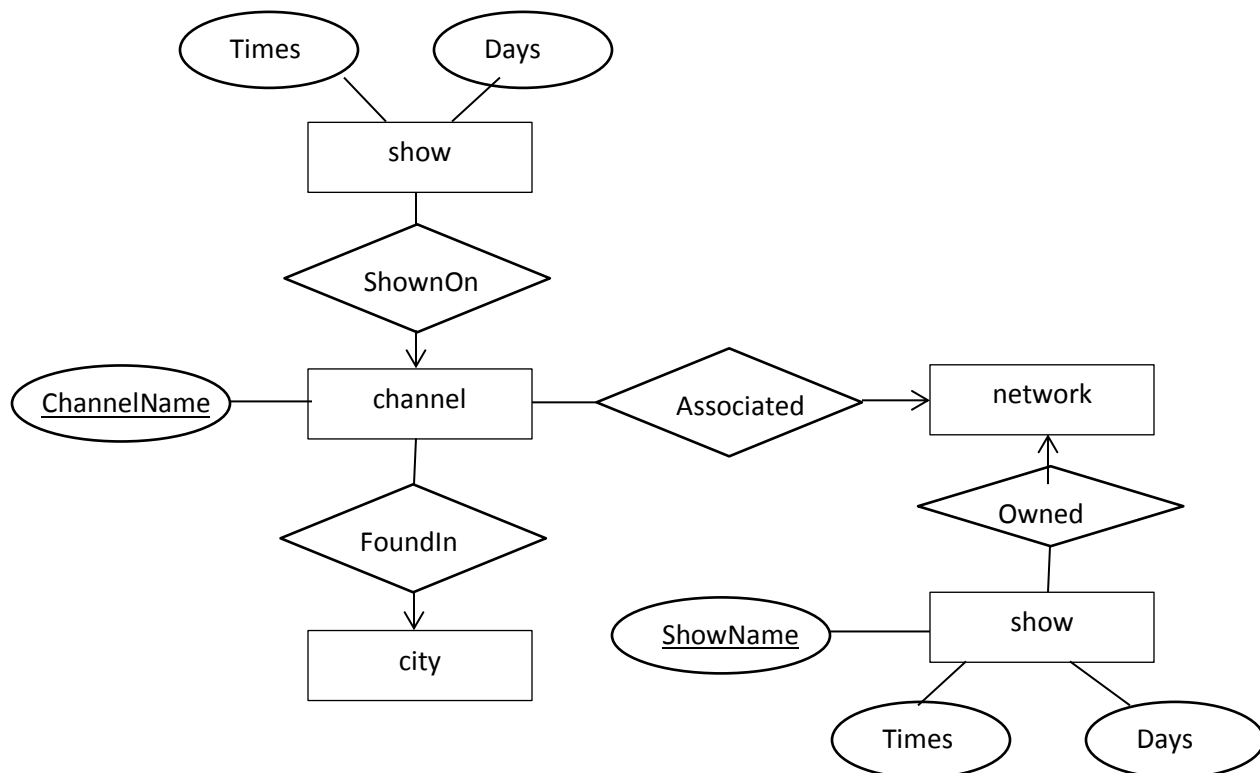
1. Since we go through all tuples in R, and there are 750000 tuples with 500 tuples per block, we must go through  $750000/500 = 1500$  block I/Os.

The second plan requires for S an extra 5000 tuples to be read with 100 tuples per block. That means we need  $5000/100 = 50$  more I/Os.

The first plan is sequential, whereas the second is random access. If random access is MUCH faster than sequential access, the second plan may be faster than the first.

2.

FoundIn(ChannelName, city)  
Associated(ChannelName, network)  
OwnedBy(ShowName, network)  
ShownOn(ShowName, channel)



3. Parts(number)  
Assembly(number, cost)  
ComposedOf(PartNumber, AssemblyNumber, quality)