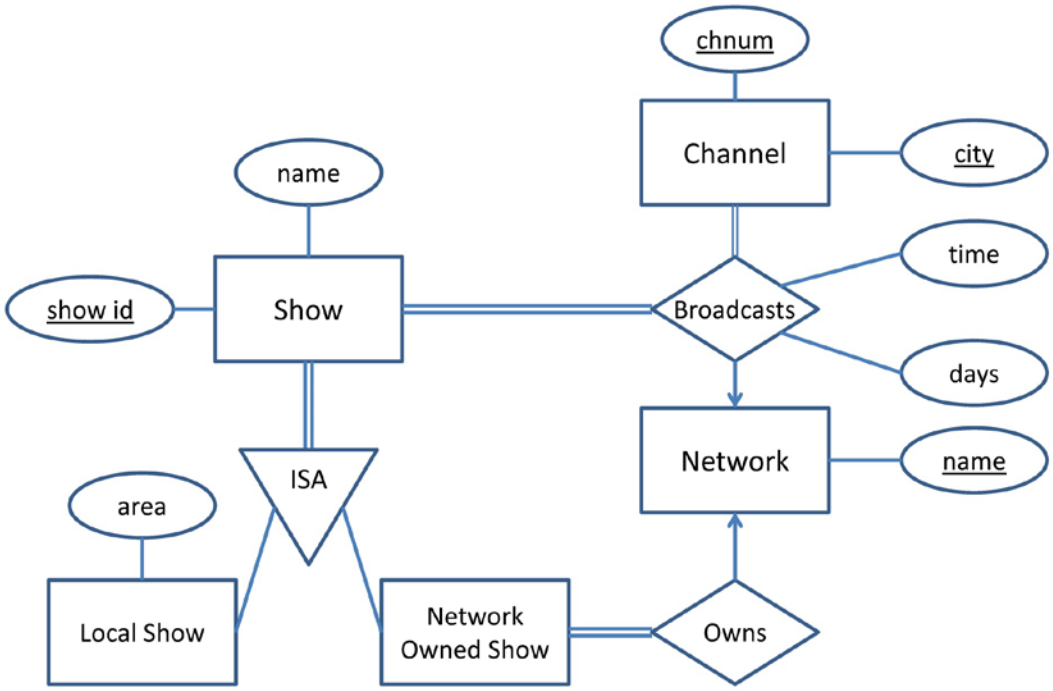
1. First query plan: 3,751,500 disk I/Os
   Second query plan: 37,501,500 disk I/Os
   Although the first query plan has an order of magnitude less disk I/Os than the second plan the second query plan would probably take less time to conduct. This is because the majority of the disk I/Os are caused by reading blocks from the S relation. In the first query plan, the index on relation S is non-clustering, so the disk I/Os will be random. However, for the second query plan, the index on relation S is clustering, and so the disk I/Os will be sequential leading to a significant time decrease in reading the blocks into main memory.



2.
3. Parts(<u>number</u>)
   Assembly(<u>number</u>, cost)
   ComposedOf(<u>Parts.number</u>, <u>Assembly.number</u>, quantity)