2.A screenshot of a computer screen

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4.

In the first query, we only need to know whether the actor is alive, whether his name starts with “Phi”, and whether he participate in any movie in 2014. So we only need to create indexes for 'members.deathyear', 'members.name', 'movies.startyear', and 'movies.actors.role.

In the second query, we only need to know whether the producer products talk shows in 2017 and whether his name contain “Gill”. So we only need to create indexes for "movies.genre", "member.name", "movies.startyear".

In the third query, we only need to know whether the writer’s name contains “Bhardwaj”, and whether the is alive. So we only need to create indexes for "member.deathyear", "member.name".

In the fourth query, we only need to know whether the producer is alive, and whether the movie is long-run movie. So we only need to create indexes for "member.deathyear", "movie.runtime".

In the fifth query, we only need to know whether movie is sci-fi movie, whether is directed by James Cameron, and whether is acted by Sigourney Weaver. So, we only need to create indexes for "temp\_all.movies.genre", "temp\_all.member.name", "members.name".

A screenshot of a cell phone

Description automatically generated