

Please finish the following assignment by 22nd July 12:00 P.M IST.

Share your answers in an MS Word or Google Docs file, with the Queries/Code used for Set #1

Set 1:

Use this data set to answer the following questions:

https://raw.githubusercontent.com/rashida048/Datasets/master/movie_dataset.csv

1. Which is the movie(s) with the smallest runtime? Which is the movie(s) with the highest runtime?
2. Take the top 5 production houses (by budget) and list their top 5 most popular movies, their revenue and vote_average
3. List the production house for every year from 2000-2016 which has released the most number of movies in that year
4. You are going to invest all your life's savings in a production company. You have two choices "Marvel Studios" and "DC Comics". Which company would you bet on? This is an open ended question. Define your own metrics to measure which one is a better investment opportunity and defend your analysis.

Set 2:

You are given the responsibility to design the following product in an e-commerce company. Give an outline of the architecture, the schemas, and tools that you would use and mention why.

1. The company is thinking of creating a marketing team that launches discounts and offers campaigns. Each of these campaigns will have a campaign manager, who can choose the category of products or even select individual products, the start and end data of the campaign and the type of offers to include in the campaign.
2. Product categories could be generic like "Electronics", "Furniture" or more specific like "Gaming Laptops". In case of a product falling into more than one categories in the same campaign, all the offers will be clubbed together. For example if there is a cashback offer on Electronics and flat discount on Gaming Laptops, then for all gaming laptops, customers will enjoy both the cashback and the flat discount. There needs to be a layer in the system that combines all the offers for a product.
3. The type of offers could be anything from flat discounts, cashbacks, offers on credit cards, loyalty based custom discounts, etc
4. You need to design the system that will allow campaign managers to create and launch a campaign. The e-commerce application will request your system to get the complete list of discounts/offers for the products in the cart at the time of checkout.

Share a doc file with detailed explanation (including any architecture diagrams etc) or any other suitable formats.