

# Benovymed Healthcare

Difficulty Level : Easy

Marks : 30

**Q3 -**

**Data Description:** Products Data

**Context:**

Product companies use Recommendation models to provide different suggestions to different users.

**Attribute Information:**

- **userId** : Every user identified with a unique id
- **productId** : Every product identified with a unique id
- **rating** : Rating of the corresponding product by the corresponding user
- **timestamp** : Time of the rating ( ignore this column for this exercise)

**Objective:**

- Perform the initial data analysis on the given data and Check the top 10 users based on ratings - 5 marks
- Calculating the density of the rating matrix - 5 marks
- Count of user\_id for each unique product as recommendation score - 5 marks
- Sort the products on recommendation score, Generate a recommendation rank based upon score and Get the top 5 recommendations - 5 marks
- Build the non personalised recommender model to make predictions - 10 marks

Apply all the necessary steps for building the recommendation system. Explain the necessary steps with comments in Jupyter notebook

**Data Source :**

Get the Data from the Q3 folder with name : product\_data for building the recommendation model.

Convert the data into CSV format before building the model

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