## Problem statement:1

Zacky Publication is publishing a new book for their customer. They want to recommend this book to their customers and they also want to create a platform for their reader so that readers can read books according to their taste.

## Problem Statement :2

Zody Tube is a video content generator platform. They have a big social media platform for recording video with songs and sharing with friends. They want to update their platform with a recommendation engine system.

## Approach:

For problem statement 1: I will prefer a content based recommendation engine Because we need to find the taste of the user on the basis of description of the book. The goal of a recommendation system is to predict the scores for unrated items of the users. The basic idea behind content filtering is that each item has some features x. For example, the movie "Love at last" is a romance movie and has a high score for feature  $x_1$ , but a low score for feature  $x_2$ .

For problem statement 2: we will use collaborative filters to recommend new video on the basis of rating given to others videos. Collaborative filter will work on overall rating given to particular video by different users. The downside of the content filtering is that it needs the side information for each item. For example, the genres such as romance and action are the side information of movies. It is very expensive to have someone watch movies and add side information for every movie out there and every movie in the future. Moreover how can one possibly list out all the features of a movie? What if one wants to add a new feature? Do we want to add the new feature to all the movies? Collaborative filtering solves this problem. To start with, let's think of the opposite approach to content filtering. Namely, can we predict the features of movies based on user preference parameters?

## Recommendation For client:

- 1- In collaborative filters to work ,we need more and more rating ,so focus should be worked on to get more and more rating and for the start of the engine we need to provide some ratings to the system so that it can start working.
- 2-In content based engine, description should be mentioned properly.
- 3-Both engine will work fine. If they have provided the right input.