We are implementing a vulnerability detecting system for the social media users by monitoring their user behaviours. The given data set is the sample data that we collected by monitoring their behaviour. Here, what we need is to create the module that will categorize the users into 3 different categories. The 3 categories are

0%-30% - Low Vulnerability

30%-60% - Medium Vulnerability

60%-100% - High Vulnerability

Total percentage level of each user should be calculated in order to categorize the users. The information from the following table can be used to calculate the total percentage of each user.

Materials

1. Data entries

|  |  |  |  |
| --- | --- | --- | --- |
| **Features** | **Feature Threshold** | **Vulnerability State** | **Percentage Level** |
| No of connection | 2000< | High | +25% |
| Time spend per day | 6< | High | +25% |
| Experience of Previous attacks | Not experienced | High | +10% |
| Availability of multi-factor authentication | Not available | High | +10% |
| Years of Experience | 12< | High | +10% |
| Awareness about social engineering attacks | Low | High | +10% |
| Involvement | High | High | +10% |

Train a Machine Learning Module using the above details. The ML module should be able to do the following tasks.

1. Calculate the percentage level of each user.
2. Categorize the users into categories according to their percentage level.
3. Store each feature that adds up to the percentage level with the user ID of all the users.