**Assignment 3**

**Submission Deadline**: 3rd January 2022 till 09:00 am (on UCP Portal)

**Marks: 40**

**Question: For the attached csv file perform the following operations:**

1. Show the total budget and the total box office revenue against each genre using a line plot. (Use separate colors for each line.)

**5 marks**

1. Show the year-wise total budget of each genre using a scatterplot.

**5 marks**

1. Show the total budget and the total box office revenue against each genre using a grouped bar plot. (The total budget and the total box office revenue must be separated using different colors.)

**5 marks**

1. Read the total box office revenue of each genre and show it using a histogram to state the most profitable genre.

**5 marks**

1. Calculate the total budget for the year 2016 and display it in percentage for each genre using a pie chart.

**5 marks**

1. Read the total budget of each genre against each year and show it using a stack plot.

**5 marks**

**Q7)** For the given text below, first save it in a text file and then generate a word cloud based on the frequency of each word. You must first eliminate all the white spaces and special characters.

**10 marks**

**Note: You are not allowed to use nltk library or STOPWORD function.**

Mango! banana apple pear.

Banana, grapes strawberry.

Apple- pear mango banana.

Kiwi "apple" mango strawberry.