

### Assignment 03 – Using the Google APIs to access YouTube Data

- **Purpose:** The purpose of this assignment is to get the YouTube from the YouTube API and analyze it. The data is being extracted using two parameters one is search term and another one is limit. We are printing the output of the analysis in 2 ways one in the terminal console and another in .csv file
- **Input:** There are 2 input parameters which are used to retrieve the data from youtube API
  1. **Search Term:** This parameter gives the result based on the keywords from YT API
  2. **Limit (No of records):** This parameter returns the No of records entered by the user from the YT API
- **Output:** There are 2 types of output for the program one is the output on the terminal console and the other one is a .csv file  
The terminal console output has 3 lists which are:
  1. List of all the videos details such as video id, views, likes, comments, duration and title
  2. List of all the videos in the order of the highest percentage likes
  3. List of all the videos in the order of the highest comments count
- **What the program does:** The program takes in two inputs from the user the search term and the limit. Once the input is entered, the program calls the YouTube API for retrieving the data using the API Key. Once the data is obtained, we take the necessary fields from the API data which was returned and analyze it. The fields are added into a .csv files and into an array. The same table is also printed in the terminal console with fields such as (video id, views, likes, comments, duration and title) Using that array we compute the remaining fields which are the likes percentage and comments count. These remaining fields are added into 2 more tables named “highest percentage likes” which contains the fields such as (like percentage, view count, likes and title) and “highest comments count” which contains the fields such as (view counts, comments and title)