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CS 581 - Online Social Networks
Assignment 3
February 11, 2020
I pledge my honor that I have abided by the Stevens Honor System - Chloe Quinto

Purpose

      The purpose of this assignment is to create a program that makes a YouTube API call given a search term and the maximum results. It then performs a number of analysis like ranking the top 5 videos based on view count, highest likes percentage, and highest dislikes percentage. This is a great assignment to get our foot in the door for working with online social networks API.

File Structure

```
.
├── main.py
└── results.csv
```

Files

- **"main.py" -** is the python program that makes the API call and develops the analysis required as per the documentation.
- **"results.csv"** - is the csv file that stores the response from the API call
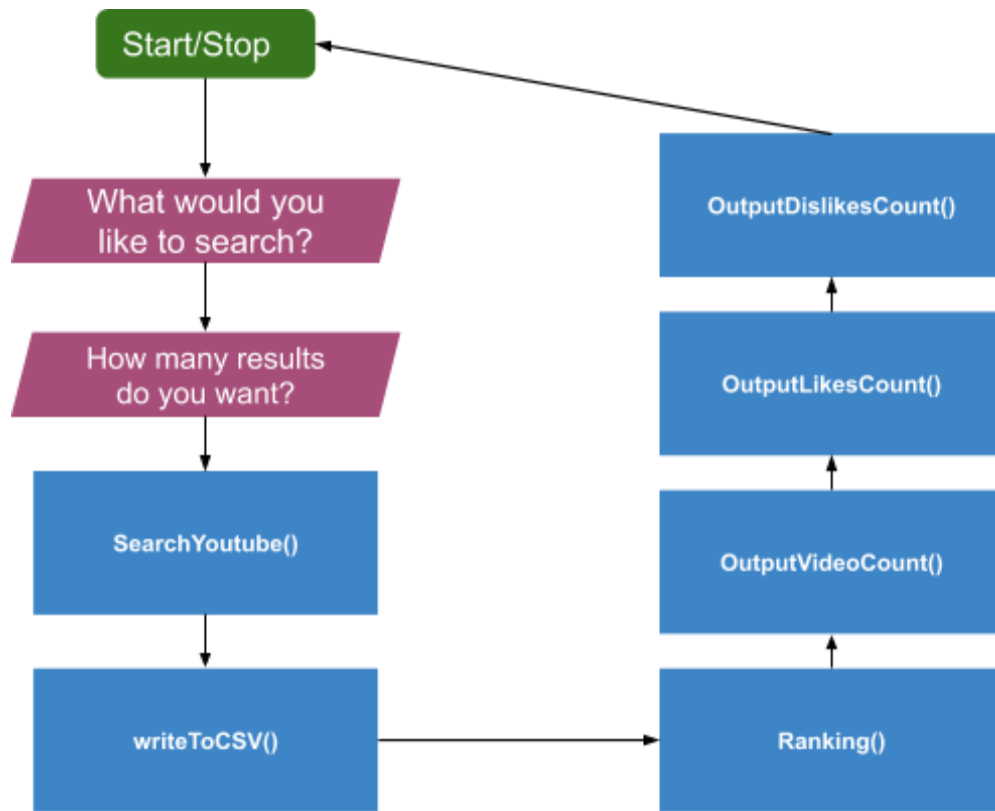
Input

      main.py prompts the user two questions
1. "What would you like to search?"
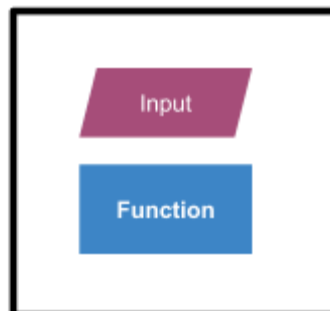2. "How many results would you like?"

The following is an example:

```
MacBook-Pro-7:a03 chloequinto$ python3 main.py
What would you like to search?
mukbang
How many results would you like?
5
```

Flow Diagram

Output

The output of "**main.py**" is several things:

The first is printing out the result (shown in Figure 2). This outputs the search term that the user has requested, the search max which is the amount of results that the user has requested, and finally the JSON response from the API call.

```
------------Searching------------
Search Term: mukbang
Search Max: 5
Results:
{'kind': 'youtube#searchListResponse', 'etag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/zER0dIi3althtTPQ4Hm2TfxNFdI"', 'nextPageToken': 'CAUQAA', 'regionCode': 'US', 'pageInfo': {'totalResults': 10
00000, 'resultsPerPage': 5}, 'items': [{'kind': 'youtube#searchResult', 'etag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/ddDVhmV3F8Y0tsBE4r-BjywYRWA"', 'id': {'kind': 'youtube#video', 'videoId': 'F
I9FYRAnCY4'}, 'snippet': {'publishedAt': '2020-02-11T04:15:02.000Z', 'channelId': 'UCBzE8s7espH9Esy0FO_iTSg', 'title': 'My Final Mukbang...... McDonald&#39;s', 'description': 'Goodbye yo
utube.', 'thumbnails': {'default': {'url': 'https://i.ytimg.com/vi/FI9FYRAnCY4/default.jpg', 'width': 120, 'height': 90}, 'medium': {'url': 'https://i.ytimg.com/vi/FI9FYRAnCY4/mqdefault.
jpg', 'width': 320, 'height': 180}, 'high': {'url': 'https://i.ytimg.com/vi/FI9FYRAnCY4/hqdefault.jpg', 'width': 480, 'height': 360}}, 'channelTitle': 'Nikocado Avocado 3', 'liveBroadcas
tContent': 'none'}}, {'kind': 'youtube#searchResult', 'etag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/hv099YSzQZzZXaQKD8IG1BOAN8o"', 'id': {'kind': 'youtube#video', 'videoId': 'PEGZy9RjdLI'}, 'sni
ppet': {'publishedAt': '2020-02-11T11:49:00.000Z', 'channelId': 'UCUxXrqHwz836pHcRZRVJLhw', 'title': '[Sub]/Real Sound/매운낙지찜 주먹밥 동치미 구운김 Mukbang eating show', 'description'
: '수향TV 유튜브 채널 https://www.youtube.com/channel/UCUxXrqHwz836pHcRZRVJLhw 협찬문의 suhyang1019@gmail.com 수향TV 아프리카 방송국 ...', 'thumbnails': {'default': {'url': 'https://i.yt
img.com/vi/PEGZy9RjdLI/default.jpg', 'width': 120, 'height': 90}, 'medium': {'url': 'https://i.ytimg.com/vi/PEGZy9RjdLI/mqdefault.jpg', 'width': 320, 'height': 180}, 'high': {'url': 'htt
ps://i.ytimg.com/vi/PEGZy9RjdLI/hqdefault.jpg', 'width': 480, 'height': 360}}, 'channelTitle': '수향TV [suhyangTV]', 'liveBroadcastContent': 'none'}}, {'kind': 'youtube#searchResult', 'e
tag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/l00fpbASE__d9R6ePH7bgeZ_AWK"', 'id': {'kind': 'youtube#video', 'videoId': 'HSxPwolOC9c'}, 'snippet': {'publishedAt': '2020-02-10T23:30:00.000Z', 'chan
nelId': 'UCZDdF_p-L88NWVpzF0vjvMQ', 'title': 'MAKING BOMB AF HOT CHEETO NOODLES/MUKBANG | Louie&#39;s Life', 'description': 'This honestly took me by surprise.. it tasted soooo good! I r
eally did not know what to expect when I thought about filming this but I was so happy with the way it ...', 'thumbnails': {'default': {'url': 'https://i.ytimg.com/vi/HSxPwolOC9c/default
.jpg', 'width': 120, 'height': 90}, 'medium': {'url': 'https://i.ytimg.com/vi/HSxPwolOC9c/mqdefault.jpg', 'width': 320, 'height': 180}, 'high': {'url': 'https://i.ytimg.com/vi/HSxPwolOC9
c/hqdefault.jpg', 'width': 480, 'height': 360}}, 'channelTitle': 'Louie's Life', 'liveBroadcastContent': 'none'}}, {'kind': 'youtube#searchResult', 'etag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/
8ZcOgAge3blVHpjKgHNR_xTr9a8"', 'id': {'kind': 'youtube#video', 'videoId': 'Qahzhw5AItA'}, 'snippet': {'publishedAt': '2020-02-09T21:07:37.000Z', 'channelId': 'UCpB959t8iPrxQWj7G6n0ctQ',
'title': 'MUKBANG FOOD that has gone TOO FAR Part 4', 'description': 'MUKBANG FOOD that has gone TOO FAR Part 4! So this is an asmr eating show with a LOT of food! Leave a Like if you en
joyed! Watch the last one ...', 'thumbnails': {'default': {'url': 'https://i.ytimg.com/vi/Qahzhw5AItA/default.jpg', 'width': 120, 'height': 90}, 'medium': {'url': 'https://i.ytimg.com/vi
/Qahzhw5AItA/mqdefault.jpg', 'width': 320, 'height': 180}, 'high': {'url': 'https://i.ytimg.com/vi/Qahzhw5AItA/hqdefault.jpg', 'width': 480, 'height': 360}}, 'channelTitle': 'SSSniperWol
f', 'liveBroadcastContent': 'none'}}, {'kind': 'youtube#searchResult', 'etag': '"Fznwjl6JEQdo1MGvHOGaz_YanRU/YOMu0XOl5aKxIPDN1RundI6uY4g"', 'id': {'kind': 'youtube#video', 'videoId': 'CV
_hN6_h88w'}, 'snippet': {'publishedAt': '2020-02-10T07:04:08.000Z', 'channelId': 'UCCeJqNJdhaydrlubVLzyErQ', 'title': 'MUKBANG ULAR C0RONA ENAK BANGET, SEMUA KUMAN BAKTER1 SEDAP MEN.', '
description': 'Bonus member baru 200%, Cashback 100% Bonus mingguan, Gabung sekarang juga! WA +6287777142174 Link: mewahbanget.com Temuin gua di ...', 'thumbnails': {'default': {'url':
https://i.ytimg.com/vi/CV_hN6_h88w/default.jpg', 'width': 120, 'height': 90}, 'medium': {'url': 'https://i.ytimg.com/vi/CV_hN6_h88w/mqdefault.jpg', 'width': 320, 'height': 180}, 'high':
{'url': 'https://i.ytimg.com/vi/CV_hN6_h88w/hqdefault.jpg', 'width': 480, 'height': 360}}, 'channelTitle': 'The Santoso', 'liveBroadcastContent': 'none'}}]}
------------End of Searching------------
```

Figure 2: Search Output

The second is a "**results.csv**" file. The contents of the results.csv is the response from the YouTube API call. The file's heading is structured as follows:

kind	etag	nextPageRank	regionCode	pageInfo	items

The third is a print statement of the analysis done on the results (shown in Figure 3). This ranks the top 5 videos in terms of the view count, highest percentage of likes count, and the highest percentage of dislikes count.

```
---------- Ranking View Count --------------
Rank: 1 Title:  MUKBANG FOOD that has gone TOO FAR Part 4 Video ID: Qahzhw5AItA ViewCount: 1784050
Rank: 2 Title:  MUKBANG ULAR C0RONA ENAK BANGET, SEMUA KUMAN BAKTER1 SEDAP MEN. Video ID: CV_hN6_h88w ViewCount: 525880
Rank: 3 Title:  MAKING BOMB AF HOT CHEETO NOODLES/MUKBANG | Louie&#39;s Life Video ID: HSxPwolOC9c ViewCount: 432473
Rank: 4 Title:  My Final Mukbang...... McDonald&#39;s Video ID: FI9FYRAnCY4 ViewCount: 103487
Rank: 5 Title:  [Sub]/Real Sound/매운낙지찜 주먹밥 동치미 구운김 Mukbang eating show Video ID: PEGZy9RjdLI ViewCount: 34435


---------- Ranking Like Count --------------
Rank: 1 Title:  MAKING BOMB AF HOT CHEETO NOODLES/MUKBANG | Louie&#39;s Life Video ID: HSxPwolOC9c Percent Likes: 7.31514
Rank: 2 Title:  MUKBANG FOOD that has gone TOO FAR Part 4 Video ID: Qahzhw5AItA Percent Likes: 4.99005
Rank: 3 Title:  [Sub]/Real Sound/매운낙지찜 주먹밥 동치미 구운김 Mukbang eating show Video ID: PEGZy9RjdLI Percent Likes: 4.93103
Rank: 4 Title:  MUKBANG ULAR C0RONA ENAK BANGET, SEMUA KUMAN BAKTER1 SEDAP MEN. Video ID: CV_hN6_h88w Percent Likes: 3.08112
Rank: 5 Title:  My Final Mukbang...... McDonald&#39;s Video ID: FI9FYRAnCY4 Percent Likes: 2.76267


---------- Ranking Dislikes Count --------------
Rank: 1 Title:  My Final Mukbang...... McDonald&#39;s  Video ID:  FI9FYRAnCY4  Percent Dislikes:  8.50252
Rank: 2 Title:  MUKBANG ULAR C0RONA ENAK BANGET, SEMUA KUMAN BAKTER1 SEDAP MEN.  Video ID:  CV_hN6_h88w  Percent Dislikes:  0.45238
Rank: 3 Title:  [Sub]/Real Sound/매운낙지찜 주먹밥 동치미 구운김 Mukbang eating show  Video ID:  PEGZy9RjdLI  Percent Dislikes:  0.21199
Rank: 4 Title:  MUKBANG FOOD that has gone TOO FAR Part 4  Video ID:  Qahzhw5AItA  Percent Dislikes:  0.08565
Rank: 5 Title:  MAKING BOMB AF HOT CHEETO NOODLES/MUKBANG | Louie&#39;s Life  Video ID:  HSxPwolOC9c  Percent Dislikes:  0.06081
```