Lab 2: Querying user's connection information using facebook graph API and retrieving feed and engagement

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Step 1

```
In [1]:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M
ACCESS_TOKEN ="EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwMau8ovxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASSI8Gv5ZCE5YkIH0z43F22S2c
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             M
In [2]:
! pip install facebook-sdk
Requirement already satisfied: facebook-sdk in c:\anaconda\pspr\lib\site-packages (3.1.0)
Requirement already satisfied: requests in c:\anaconda\pspr\lib\site-packages (from facebook-sdk) (2.27.1)
Requirement already satisfied: urllib3<1.27,>=1.21.1 in c:\anaconda\pspr\lib\site-packages (from requests->facebook-sdk) in c:\anaconda\pspr
(1.26.9)
Requirement already satisfied: certifi>=2017.4.17 in c:\anaconda\pspr\lib\site-packages (from requests->facebook-sdk) (202
2.12.7)
Requirement\ already\ satisfied:\ charset-normalizer \sim = 2.0.0\ in\ c:\ already\ satisfied:\ 
k) (2.0.4)
[notice] A new release of pip is available: 23.1.2 -> 23.2
[notice] To update, run: python.exe -m pip install --upgrade pip
Requirement already satisfied: idna<4,>=2.5 in c:\anaconda\pspr\lib\site-packages (from requests->facebook-sdk) (2.10)
```

Step 2: Install the neccesary libaries

```
import facebook
import urllib3
import requests
import json
```

Step 3: Querying the graph API with python

```
In [4]:

def pp(o):
    print(json.dumps(o,indent=1))
# create a Connection to the Graph API with access token
g = facebook.GraphAPI(ACCESS_TOKEN,version='2.10')
# get my ID
pp(g.get_object('me'))

{
    "name": "Ezhil C",
    "id": "101458556368842"
}
```

Step 4: Get the user's connection names -likes, friends feed, group- This may require permissions

```
In [5]:
                                                                                                                                                                                                                                                                                                                                                                                                               M
pp(g.get_connections(id='me',connection_name = 'likes'))
{
    "data": [
         "name": "Actor Vijay",
"id": "584512021569368"
          "created_time": "2023-07-19T07:21:26+0000"
         "name": "Nelson Dilipkumar",
"id": "1872288492999080",
         "created_time": "2023-07-19T06:34:25+0000"
      },
          "name": "Anirudh Ravichander",
         "id": "219819918089278",
          "created_time": "2023-07-19T06:34:12+0000"
      },
      "id": "110224217158179",
          "created_time": "2023-07-19T06:33:36+0000"
      },
         "name": "Virat Kohli",
"id": "326546224099154"
          "created_time": "2023-07-19T06:33:23+0000"
          "name": "MS Dhoni",
         "id": "1710096432546912"
          "created_time": "2023-07-19T06:32:30+0000"
      paging": {
        "cursors": {
    "before": "NTg0NTEyMDIxNTY5MzY4",
    "after": "MTcxMDA5NjQzMjU0NjkxMgZDZD"
                                                                                                                                                                                                                                                                                                                                                                                                               M
In [6]:
pp(g.get_connections(id='me',connection_name = 'friends'))
{
    "data": [],
     "summary": {
        "total_count": 3
In [7]:
                                                                                                                                                                                                                                                                                                                                                                                                               M
pp(g.get_connections(id='me',connection_name='feed'))
{
    "data": [
      {
    "created_time": "2002-10-28T08:00:00+0000",
         "id": "101458556368842_101434776371220"
   ],
     "paging": {
        "previous": "https://graph.facebook.com/v17.0/101458556368842/feed?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwM
 EcDuptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD&__previous=1&since=1035
iY5LC1PN8yz8lNZCUVdTKRwZDZD",
       "next": "https://graph.facebook.com/v17.0/101458556368842/feed?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwMau8o
vxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASS18Gv5ZCE5YkIH0z43F22S2o8mCaSvjaB8upg1w06MfsroWKftg0easIZCYf8v7QTEcDustron (Control of the Control o
ptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD\&until=1035792000\&since \&\_partive for the first of 
ging_token=enc_AdAii1cIKFcKigxmd9FM01ZA8h7NoswJsKoWYWzP0E7Txz3YhPA6Pc2v0vZA2LljpZCPNLWFwNmQa3hihu05ksYftfCiY5LC1PN8yz8lNZCU
VdTKRwZDZD&__previous"
  }
```

```
In [8]:
                                                                                                                                              M
pp(g.get connections(id='me',connection name='groups'))
{
    "data": [
   "name": "Python Machine Learning",
   "id": "699038760180241
   "name": "Python Machine Learning & Deep Learning",
   "id": "1583643181679576"
  \{ "name": "MACHINE LEARNING AND ARTIFICIAL INTELLIGENCE PROFESSIONALS GROUP",
   "id": "197964893963666"
  paging": {
   "cursors": {
   "before": <sup>"</sup>QVFIUmNldHVBNTBtd21CQWZAFN0pMcHZACXzU3aGlJUmVGYkVsVG1BTmRLTzQtQjNBdFhLVGxSSkg2bzNFcmkzc082LXRpYzRXRnR1SG0tQXB
hZAlJQUUxYMjB3",
   "after": "QVFIUmF2UzJUQ0VEYmxJdXR2d1k2UHYxUXM2cHBtnk12a3ZAhMTNmZAklYRzFkWWFsemZAycmRBNTNhYVlYLUhvWlltN21xYXVjS1NlMVVTck8
0UG1JSkY2M0Nn'
  }
}
}
```

Step 5: Get information about a feed in your facebook page

```
In [9]:
                                                                                                                                                                                                                                                                                                                                                              M
pp(g.get_connections(id='me', connection_name='feed', fields='message,created_time', limit='100'))
{
    "data": [
         "created_time": "2002-10-28T08:00:00+0000";
        "id": "101458556368842_101434776371220"
     }
     'paging": {
       "previous": "https://graph.facebook.com/v17.0/101458556368842/feed?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwM
 au8ovxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASSI8Gv5ZCE5YkIH0z43F22S2o8mCaSvjaB8upg1w06MfsroWKftg0easIZCYf8v7QTAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPACASSIRAPAC
EcDuptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD&fields=message%2Ccreate
d time& previous=1&since=1035792000&until& paging token=enc AdAii1cIKFcKigxmd9FM0lZA8h7NoswJsKoWYWzP0E7Txz3YhPA6Pc2v0vZA2
LljpZCPNLWFwNmQa3hihuO5ksYftfCiY5LC1PN8yz8lNZCUVdTKRwZDZD",
       "next": "https://graph.facebook.com/v17.0/101458556368842/feed?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwMau8o
vxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASSI8Gv5ZCE5YkIH0z43F22S2o8mCaSvjaB8upg1w06MfsroWKftg0easIZCYf8v7QTEcDu
ptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD\&fields=message%2Ccreated\_ti
me&until=1035792000&since&_paging_token=enc_AdAii1cIKFcKigxmd9FM01ZA8h7NoswJsKoWYWzP0E7Txz3YhPA6Pc2v0vZA2LljpZCPNLWFwNmQa3hihu05ksYftfCiY5LC1PN8yz8lNZCUVdTKRwZDZD&__previous"
   }
}
```

Step 6: Get the metrics towards engagement of connections towards your facebook post

```
In [10]:
                                                                                                                                         Ы
pp(g.get_connections(id='me', connection_name='posts', fields='caption,created_time,description', limit='100'))
{
    "data": [
  {
    "caption": "Born",
   "created_time": "2002-10-28T08:00:00+0000",
   "id": "101458556368842_101434776371220"
 ],
  paging": {
  "previous": "https://graph.facebook.com/v17.0/101458556368842/posts?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZA
cPwMau8ovxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASSI8Gv5ZCE5YkIH0z43F22S2o8mCaSvjaB8upg1w06MfsroWKftg0easIZC
Yf8v7QTEcDuptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD&fields=captio
n%2Ccreated_time%2Cdescription&_previous=1&since=1035792000&until&_paging_token=enc_AdAii1cIKFcKigxmd9FM0lZA8h7NoswJsK
OWYWzP0E7Txz3YhPA6Pc2v0vZA2LljpZCPNLWFwNmQa3hihuO5ksYftfCiY5LC1PN8yz8lNZCUVdTKRwZDZD",
  next": "https://graph.facebook.com/v17.0/101458556368842/posts?access_token=EAAEqgZBiuVR8BAGeFZAZAwZApsHHTY8qdYZAcPwM"
au8ovxxNWQ9SgyZCMqUxpcCAwtYLItNN7Y0ahUE4VdsmbLSYQUJZApxdASSI8Gv5ZCE5YkIH0z43F22S2o8mCaSvjaB8upg1w06MfsroWKftg0easIZCYf8v
7QTEcDuptayazNNPQJNaUmmcWrqejIex8i5e0aBV88wh99acbGrtIwliM7sowH9NtI5jox9YnldrPv4f75SUy67ghr1DwAUGCRgsZD&fields=caption%2C
created_time%2Cdescription&until=1035792000&since&__paging_token=enc_AdAii1cIKFcKigxmd9FM0IZA8h7NoswJsKoWYWzP0E7Txz3YhPA
6Pc2v0vZA2LlipZCPNLWFwNmOa3hihuO5ksYftfCiY5LC1PN8vz8lNZCUVdTKRwZDZD& previous'
```

In []: