reading data

April 17, 2025

```
[3]: !pip install boto3
     import boto3
     from io import BytesIO
     import pandas as pd
     # you need to change the credentials for yourself
     # Note that aws_access_key_id changes from time to time
     s3 = boto3.client('s3',
                       aws_access_key_id='ASIAYAAO5HRMGKLEMBMS',
      →aws_secret_access_key='kruEgaOwlORdr7psOHKwbOHKPrb9pHV0j9wXc1s7',
                       aws_session_token='IQoJb3JpZ2luX2VjEN3///////
      wEaCXVzLWVhc3QtMiJGMEQCIFsrsexFfDzAZOcVL6EvZtieDN4kXK5D9WhwhhhWVsEJAiBYkMZUO3q$vzma80th5GB9
      →nnlmKkYdKsgCCvtLsQgrqOF7HguLBuG5GZ8p+/
      41QhWEf5rdNqsthb+aVx5EudRNd2as0CifPAoWnMFE25Q7yr8gjnLnPOwN9vhqqZuZ0mDeCT1EDvBF2ZCUDusr9ibJp
      -lCvIA2RvgeexCDn27excD8IimCUcIaCTY6NVW0C3bKLY2rgMRXdvmKFWtxpVhi+rI1X0x68yQILJB9TkXkM17Zh8b+h
      →euuc7PenVbqeh/uRiGql5XEUQIZu/
      SXUa4mjoXkh3qF7DAVVXy0Ufay2xVyEk70xCD4MT56+EGLHk1b68vOs3o0alSUZ5bCvk0I0jG/
      →na6Uy9rtnojAFuGxn6k5a4RAFChHCgMHaJAcLFtzC01oXABjqoAZQoPa58TErKvY6qt0jwE7qDAjBjWGcpFPe/
      -qggyHBjf0c1YEQjvY/tLsoCfkGYKPHHktZOCGWzYdZ30k5m5q7RGCYHJPmBWX1AmNTIFLr1Gf/
      →f6f0usUnxTNVxR2Iu930CT3/eUyd27J2BNgo8YEdE3dhgi/
      →+SUJWKCALEk8x0Pl00dPGB75RpUa4F4q9GkZrSNhI9yi/BFDn0YoOgZioX3KxTdqF0TKA==')
     bucket_name = 'de300spring2025'
     object_key = 'dinglin_xia/sample_dataset.csv'
     csv_obj = s3.get_object(Bucket=bucket_name, Key=object_key)
     body = csv_obj['Body']
     csv_string = body.read().decode('utf-8')
     df = pd.read_csv(BytesIO(csv_string.encode()))
     print(df.head())
    Requirement already satisfied: boto3 in /opt/conda/lib/python3.11/site-packages
    (1.37.36)
    Requirement already satisfied: botocore<1.38.0,>=1.37.36 in
    /opt/conda/lib/python3.11/site-packages (from boto3) (1.37.36)
    Requirement already satisfied: jmespath<2.0.0,>=0.7.1 in
    /opt/conda/lib/python3.11/site-packages (from boto3) (1.0.1)
```

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Requirement already satisfied: s3transfer<0.12.0,>=0.11.0 in
/opt/conda/lib/python3.11/site-packages (from boto3) (0.11.5)
Requirement already satisfied: python-dateutil<3.0.0,>=2.1 in
/opt/conda/lib/python3.11/site-packages (from botocore<1.38.0,>=1.37.36->boto3)
(2.8.2)
Requirement already satisfied: urllib3!=2.2.0,<3,>=1.25.4 in
/opt/conda/lib/python3.11/site-packages (from botocore<1.38.0,>=1.37.36->boto3)
(2.0.7)
Requirement already satisfied: six>=1.5 in /opt/conda/lib/python3.11/site-
packages (from python-dateutil<3.0.0,>=2.1->botocore<1.38.0,>=1.37.36->boto3)
(1.16.0)
  first_name last_name
                             gender
                                         occupation
                                                               city state
                        age
0
                         30
                                                                       NY
        John
                   Doe
                               Male
                                           Engineer
                                                           New York
1
        Jane
                   Doe
                         28 Female
                                           Engineer
                                                        Los Angeles
                                                                       CA
2
         Bob
                         45
                               Male
                                                            Chicago
                 Smith
                                             Analyst
                                                                       IL
3
       Alice
               Johnson
                         35 Female Data Scientist
                                                     San Francisco
                                                                       CA
4
         Tom
                 Brown
                         50
                               Male
                                             Lawyer
                                                              Miami
                                                                       FL
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[]: