

```
In [1]: 1 import pandas as pd
        2 import numpy as np
```

```
In [2]: 1 data=pd.read_csv("/home/placement/Downloads/movies.csv")
```

```
In [3]: 1 data.describe()
        2
```

Out[3]:

| | srno | year | rating | time |
|-------|--------------|--------------|--------------|--------------|
| count | 49590.000000 | 49590.000000 | 10814.000000 | 45836.000000 |
| mean | 24795.500000 | 2002.303428 | 3.451248 | 2628.445436 |
| std | 14315.544261 | 12.534555 | 0.495601 | 1604.646265 |
| min | 1.000000 | 1913.000000 | 1.400000 | 52.000000 |
| 25% | 12398.250000 | 1999.000000 | 3.100000 | 1356.000000 |
| 50% | 24795.500000 | 2007.000000 | 3.500000 | 2563.000000 |
| 75% | 37192.750000 | 2010.000000 | 3.800000 | 2877.000000 |
| max | 49590.000000 | 2014.000000 | 4.500000 | 28813.000000 |

```
In [4]: 1 data.head(5)
```

Out[4]:

| | srno | movie | year | rating | time |
|---|------|----------------------|------|--------|--------|
| 0 | 1 | The Nightmare Before | 1993 | 3.9 | 4568.0 |
| 1 | 2 | The Mummy | 1932 | 3.5 | 4388.0 |
| 2 | 3 | Orphans of the Storm | 1921 | 3.2 | 9062.0 |
| 3 | 4 | The Object of Beauty | 1991 | 2.8 | 6150.0 |
| 4 | 5 | Night Tide | 1963 | 2.8 | 5126.0 |

```
In [5]: 1 data1=data.loc[data.time>5000]
        2 data1
```

Out[5]:

| | srno | movie | year | rating | time | |
|-------|-------|---------------------------------------|----------------------|--------|--------|--------|
| | 2 | 3 | Orphans of the Storm | 1921 | 3.2 | 9062.0 |
| | 3 | 4 | The Object of Beauty | 1991 | 2.8 | 6150.0 |
| | 4 | 5 | Night Tide | 1963 | 2.8 | 5126.0 |
| | 5 | 6 | One Magic Christmas | 1985 | 3.8 | 5333.0 |
| | 6 | 7 | Muriel's Wedding | 1994 | 3.5 | 6323.0 |
| | ... | ... | ... | ... | ... | ... |
| 49564 | 49565 | American Addict | 2013 | 3.5 | 5377.0 | |
| 49579 | 49580 | Underground: The Julian Assange Story | 2012 | 3.7 | 5665.0 | |
| 49583 | 49584 | Sunset Strip | 2012 | 3.0 | 5770.0 | |
| 49584 | 49585 | Silver Bells | 2013 | 3.5 | 5287.0 | |
| 49586 | 49587 | Top Gear: Series 19: Africa Special | 2013 | NaN | 6822.0 | |

5897 rows × 5 columns

```
In [7]: 1 data1=data.loc[(data.time>5000)&(data.year==2000)]  
        2 data1
```

Out[7]:

| | srno | movie | year | rating | time |
|--------------|-------|----------------------------|------|--------|--------|
| 409 | 410 | Believe | 2000 | 3.3 | 5767.0 |
| 416 | 417 | The Prophecy 3: The Ascent | 2000 | 3.4 | 5048.0 |
| 430 | 431 | Scream 3 | 2000 | 3.2 | 7013.0 |
| 432 | 433 | Holy Smoke | 2000 | 3.0 | 6855.0 |
| 437 | 438 | Requiem for a Dream | 2000 | 3.9 | 6087.0 |
| ... | ... | ... | ... | ... | ... |
| 32557 | 32558 | Shaded Places | 2000 | 2.9 | 5350.0 |
| 36229 | 36230 | The Three Stooges | 2000 | 3.7 | 5256.0 |
| 37333 | 37334 | Les Miserables: Pt. 2 | 2000 | NaN | 5170.0 |
| 37336 | 37337 | Les Miserables: Pt. 1 | 2000 | NaN | 5194.0 |
| 39493 | 39494 | The Prophet's Game | 2000 | 3.2 | 6486.0 |

137 rows × 5 columns

```
In [8]: 1 data.tail(50)
```

```
Out[8]:
```

| | srno | movie | year | rating | time |
|-------|-------|---|------|--------|--------|
| 49540 | 49541 | Life With Boys: Season 1: This Time the Proble... | 2011 | NaN | 1368.0 |
| 49541 | 49542 | Life With Boys: Season 1: In the Principal's O... | 2011 | NaN | 1368.0 |
| 49542 | 49543 | El Fuente: 5994 MP | 2013 | 3.5 | 471.0 |
| 49543 | 49544 | Life With Boys: Season 1: Monkey Talk with Boys | 2011 | NaN | 1368.0 |
| 49544 | 49545 | El Fuente: 50 MP | 2013 | 3.3 | 465.0 |
| 49545 | 49546 | Bo Burnham: what. | 2013 | 4.1 | 3614.0 |
| 49546 | 49547 | Life With Boys: Season 1: A Perfect Life with ... | 2011 | NaN | 1368.0 |
| 49547 | 49548 | Life With Boys: Season 1: Wrestling with Boys | 2011 | NaN | 1369.0 |
| 49548 | 49549 | Life With Boys: Season 1 | 2011 | 4.1 | NaN |
| 49549 | 49550 | El Fuente: 30 MP | 2013 | 3.3 | 471.0 |
| 49550 | 49551 | El Fuente: 2997 MP | 2013 | 3.2 | 471.0 |
| 49551 | 49552 | El Fuente: 25 MP | 2013 | 3.3 | 465.0 |
| 49552 | 49553 | El Fuente: 24 MP | 2013 | 3.5 | 484.0 |
| 49553 | 49554 | Max Steel | 2013 | 4.1 | NaN |
| 49554 | 49555 | Saving Santa | 2013 | 3.8 | 5038.0 |
| 49555 | 49556 | Lilyhammer: Season 1 (Recap) | 2013 | 4.2 | 194.0 |
| 49556 | 49557 | Shinobi Girl | 2012 | 2.0 | NaN |
| 49557 | 49558 | GLOW: The Story of the Gorgeous Ladies of Wres... | 2012 | 3.7 | 4593.0 |
| 49558 | 49559 | Mitt (Trailer) | 2013 | 3.0 | 138.0 |
| 49559 | 49560 | My Hope America with Billy Graham: The Cross | 2013 | NaN | 1706.0 |
| 49560 | 49561 | The Square (Trailer) | 2014 | 3.6 | 154.0 |
| 49561 | 49562 | My Hope America with Billy Graham | 2013 | 3.9 | NaN |
| 49562 | 49563 | My Hope America with Billy Graham: Defining Mo... | 2013 | NaN | 1791.0 |

| | srno | movie | year | rating | time |
|-------|-------|---|------|--------|--------|
| 49563 | 49564 | My Hope America with Billy Graham: Lose to Gain | 2013 | NaN | 1400.0 |
| 49564 | 49565 | American Addict | 2013 | 3.5 | 5377.0 |
| 49565 | 49566 | My Hope America with Billy Graham | 2013 | 3.9 | NaN |
| 49566 | 49567 | El Fuente: 2997 MP10 | 2013 | 2.7 | 470.0 |
| 49567 | 49568 | El Fuente: 25 MP10 | 2013 | 2.9 | 464.0 |
| 49568 | 49569 | El Fuente: 24 MP10 | 2013 | 2.8 | 484.0 |
| 49569 | 49570 | El Fuente: 23976 MP10 | 2013 | 2.9 | 484.0 |
| 49570 | 49571 | The Short Game (Trailer) | 2013 | 4.1 | 156.0 |
| 49571 | 49572 | El Fuente: 5994 MP10 | 2013 | 2.8 | 471.0 |
| 49572 | 49573 | El Fuente: 50 MP10 | 2013 | 2.9 | 464.0 |
| 49573 | 49574 | El Fuente: 30 MP10 | 2013 | 2.8 | 470.0 |
| 49574 | 49575 | Greg Fitzsimmons: Life on Stage | 2013 | 3.3 | 3671.0 |
| 49575 | 49576 | Dave Foley: Relatively Well | 2013 | 3.2 | 3446.0 |
| 49576 | 49577 | Barbie: Life in the Dreamhouse: Barbie Life in... | 2013 | NaN | 1390.0 |
| 49577 | 49578 | Barbie: Life in the Dreamhouse: Barbie Life in... | 2013 | NaN | 1458.0 |
| 49578 | 49579 | Transformers Prime Beast Hunters: Predacons Ri... | 2013 | 4.2 | 3950.0 |
| 49579 | 49580 | Underground: The Julian Assange Story | 2012 | 3.7 | 5665.0 |
| 49580 | 49581 | Curious George: A Very Monkey Christmas | 2009 | 3.8 | 3438.0 |
| 49581 | 49582 | Mumfie's White Christmas | 1996 | 2.4 | 1350.0 |
| 49582 | 49583 | Lady Gaga & The Muppets' Holiday Spectacular | 2013 | 3.1 | 3496.0 |
| 49583 | 49584 | Sunset Strip | 2012 | 3.0 | 5770.0 |
| 49584 | 49585 | Silver Bells | 2013 | 3.5 | 5287.0 |
| 49585 | 49586 | Winter Wonderland | 2013 | 2.8 | 1812.0 |
| 49586 | 49587 | Top Gear: Series 19: Africa Special | 2013 | NaN | 6822.0 |
| 49587 | 49588 | Fireplace For Your Home: Crackling Fireplace w... | 2010 | NaN | 3610.0 |

```
In [9]: 1 data.tail(5)
```

Out[9]:

| | srno | movie | year | rating | time |
|--------------|-------|---|------|--------|--------|
| 49585 | 49586 | Winter Wonderland | 2013 | 2.8 | 1812.0 |
| 49586 | 49587 | Top Gear: Series 19: Africa Special | 2013 | NaN | 6822.0 |
| 49587 | 49588 | Fireplace For Your Home: Crackling Fireplace w... | 2010 | NaN | 3610.0 |
| 49588 | 49589 | Kate Plus Ei8ht | 2010 | 2.7 | NaN |
| 49589 | 49590 | Kate Plus Ei8ht: Season 1 | 2010 | 2.7 | NaN |

```
In [10]: 1 data1=data.loc[(data.rating>4)&(data.year==2010|2011)]
          2 data1
```

Out[10]:

| | srno | movie | year | rating | time |
|--------------|-------|---------------------------------|------|--------|--------|
| 12268 | 12269 | Ip Man 2 | 2011 | 4.3 | 6490.0 |
| 12877 | 12878 | Warrior | 2011 | 4.4 | 8393.0 |
| 13007 | 13008 | Breakout Kings: Season 1 | 2011 | 4.1 | NaN |
| 13346 | 13347 | The Chicago Code: Season 1 | 2011 | 4.2 | NaN |
| 14953 | 14954 | United States of Tara: Season 3 | 2011 | 4.1 | NaN |
| ... | ... | ... | ... | ... | ... |
| 48845 | 48846 | Gator Boys | 2011 | 4.1 | NaN |
| 48859 | 48860 | Too Cute! | 2011 | 4.3 | NaN |
| 48866 | 48867 | Alaska: The Last Frontier | 2011 | 4.1 | NaN |
| 49504 | 49505 | Life With Boys | 2011 | 4.1 | NaN |
| 49548 | 49549 | Life With Boys: Season 1 | 2011 | 4.1 | NaN |

157 rows × 5 columns

```
In [12]: 1 data1=data.loc[(data.ratings>=3)&(data.year>2000)&(data.year==2000)]
```

```
-----  
AttributeError                                Traceback (most recent call last)  
<ipython-input-12-7e13bf0f4ad9> in <module>  
----> 1 data1=data.loc[(data.ratings>=3)&(data.year>2000)&(data.year==2000)]  
  
~/.local/lib/python3.8/site-packages/pandas/core/generic.py in __getattr__(self, name)  
    5987         ):  
    5988             return self[name]  
-> 5989         return object.__getattribute__(self, name)  
    5990  
    5991     def __setattr__(self, name: str, value) -> None:  
  
AttributeError: 'DataFrame' object has no attribute 'ratings'
```

```
In [14]: 1 data=data.sort_values('time')
          2 data1
```

Out[14]:

| | srno | movie | year | rating | time |
|--------------|-------|---------------------------------|------|--------|--------|
| 12268 | 12269 | Ip Man 2 | 2011 | 4.3 | 6490.0 |
| 12877 | 12878 | Warrior | 2011 | 4.4 | 8393.0 |
| 13007 | 13008 | Breakout Kings: Season 1 | 2011 | 4.1 | NaN |
| 13346 | 13347 | The Chicago Code: Season 1 | 2011 | 4.2 | NaN |
| 14953 | 14954 | United States of Tara: Season 3 | 2011 | 4.1 | NaN |
| ... | ... | ... | ... | ... | ... |
| 48845 | 48846 | Gator Boys | 2011 | 4.1 | NaN |
| 48859 | 48860 | Too Cute! | 2011 | 4.3 | NaN |
| 48866 | 48867 | Alaska: The Last Frontier | 2011 | 4.1 | NaN |
| 49504 | 49505 | Life With Boys | 2011 | 4.1 | NaN |
| 49548 | 49549 | Life With Boys: Season 1 | 2011 | 4.1 | NaN |

157 rows × 5 columns


```
In [15]: 1 data.head(10)
```

```
Out[15]:
```

| | srno | movie | year | rating | time |
|--------------|-------|------------------------|------|--------|------|
| 40150 | 40151 | Trailer: Pain | 2012 | 3.6 | 52.0 |
| 41081 | 41082 | Trailer: Get to Work | 2012 | 3.3 | 55.0 |
| 41082 | 41083 | Trailer: Give and Take | 2012 | 3.3 | 66.0 |
| 43166 | 43167 | Trailer: Emperor | 2013 | 3.1 | 67.0 |
| 43330 | 43331 | Trailer: Blood Angel | 2013 | 4.2 | 69.0 |
| 40149 | 40150 | Trailer: Lift the Veil | 2012 | 3.6 | 69.0 |
| 40789 | 40790 | Trailer: Gray Area | 2012 | 3.7 | 70.0 |
| 40154 | 40155 | Trailer: Cleave | 2012 | 3.5 | 71.0 |
| 43168 | 43169 | Trailer: Masks | 2013 | 4.2 | 73.0 |
| 45745 | 45746 | Trailer: Strip Search | 2013 | 3.6 | 73.0 |

```
In [16]: 1 !pip3 install pymysql
```

```
Collecting pymysql
```

```
  Downloading PyMySQL-1.0.3-py3-none-any.whl (43 kB)
```

```
    |██████████████████████████████████████| 43 kB 250 kB/s eta 0:00:01
```

```
Installing collected packages: pymysql
```

```
Successfully installed pymysql-1.0.3
```

```
In [17]: 1 import pymysql
```

```
In [18]: 1 print("pymysql pgm")
```

```
pymysql pgm
```

```
In [21]: 1 conn = pymysql.connect(user='root',host='localhost',passwd='1234')
```

```
-----
OperationalError                                Traceback (most recent call last)
<ipython-input-21-0c30d8095308> in <module>
----> 1 conn = pymysql.connect(user='root',host='localhost',passwd='1234')

~/.local/lib/python3.8/site-packages/pymysql/connections.py in __init__(self, user, password, host, databa
se, unix_socket, port, charset, sql_mode, read_default_file, conv, use_unicode, client_flag, cursorclass,
init_command, connect_timeout, read_default_group, autocommit, local_infile, max_allowed_packet, defer_con
nect, auth_plugin_map, read_timeout, write_timeout, bind_address, binary_prefix, program_name, server_publ
ic_key, ssl, ssl_ca, ssl_cert, ssl_disabled, ssl_key, ssl_verify_cert, ssl_verify_identity, compress, name
d_pipe, passwd, db)
    350         self._sock = None
    351     else:
--> 352         self.connect()
    353
    354     def __enter__(self):

~/.local/lib/python3.8/site-packages/pymysql/connections.py in connect(self, sock)
    634
    635         self._get_server_information()
--> 636         self._request_authentication()
    637
    638         if self.sql_mode is not None:

~/.local/lib/python3.8/site-packages/pymysql/connections.py in _request_authentication(self)
    909
    910         self.write_packet(data)
--> 911         auth_packet = self._read_packet()
    912
    913         # if authentication method isn't accepted the first byte

~/.local/lib/python3.8/site-packages/pymysql/connections.py in _read_packet(self, packet_type)
    727         if self._result is not None and self._result.unbuffered_active is True:
    728             self._result.unbuffered_active = False
--> 729         packet.raise_for_error()
    730         return packet
    731
```

```
~/.local/lib/python3.8/site-packages/pymysql/protocol.py in raise_for_error(self)
    219         if DEBUG:
    220             print("errno =", errno)
--> 221         err.raise_mysql_exception(self._data)
    222
    223     def dump(self):

~/.local/lib/python3.8/site-packages/pymysql/err.py in raise_mysql_exception(data)
    141     if errorclass is None:
    142         errorclass = InternalError if errno < 1000 else OperationalError
--> 143     raise errorclass(errno, errval)
```

OperationalError: (1698, "Access denied for user 'root'@'localhost'")

In [22]: 1 **import** pymysql

In [23]: 1 x=pymysql.connect(host='localhost',user='root',Password='Password@123,database='project1')
2 cr=x.cursor()

File "<ipython-input-23-97a07bf1f0c3>", line 1
x=pymysql.connect(host='localhost',user='root',Password='Password@123,database='project1')
^

SyntaxError: invalid syntax

In [24]: 1 !pip3 install pymysql

Requirement already satisfied: pymysql in ~/.local/lib/python3.8/site-packages (1.0.3)

In [25]: 1 **import** pymysql

In [27]: 1 x=pymysql.connect(host='localhost',user='root',password='Password@123',database='project1')
2 cr=x.cursor()

In [33]: 1 cr.execute('insert into data1(id,name,mob,dept)values(234,'rahul',67,'cse')")

File "<ipython-input-33-bf52bb3cf166>", line 1

```
cr.execute('insert into data1(id,name,mob,dept)values(234,'rahul',67,'cse')")
      ^
```

SyntaxError: invalid syntax

In []: 1