

In [2]: `import pandas as pd  
olympic_data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advance-Python-Numpy/main/olympics.csv", skiprows=4)`

In [4]: `olympic_data.index.values`  
Out[4]: `array([ 0, 1, 2, ..., 29213, 29214, 29215], dtype=int64)`

In [5]: `olympic_data.columns.values`  
Out[5]: `array(['City', 'Edition', 'Sport', 'Discipline', 'Athlete', 'NOC', 'Gender', 'Event', 'Event_gender', 'Medal'], dtype=object)`

In [6]: `olympic_data.index.hasnans`  
Out[6]: `False`

In [7]: `olympic_data.columns.hasnans`  
Out[7]: `False`

In [8]: `olympic_data.index.has_duplicates`  
Out[8]: `False`

In [9]: `olympic_data.columns.has_duplicates`  
Out[9]: `False`

In [10]: `olympic_data.index.nbytes`  
Out[10]: `128`

In [11]: `olympic_data.columns.nbytes`  
Out[11]: `80`

In [12]: `olympic_data.query("Athlete.str.contains('OWENS, Jesse')").Event`  
Out[12]: `6427 100m  
6439 200m  
6456 4x100m relay  
6523 long jump  
Name: Event, dtype: object`

In [13]: `olympic_data.query("(Medal=='Gold')and(Gender=='Men')and(Event=='singles')and(Discipline=='Badminton')").sort_values(by=['Athlete'])`  
Out[13]:

	City	Edition	Sport	Discipline	Athlete	NOC	Gender	Event	Event_gender	Medal
20045	Barcelona	1992	Badminton	Badminton	BUDI KUSUMA, Alan	INA	Men	singles	M	Gold
25734	Athens	2004	Badminton	Badminton	HIDAYAT, Taufik	INA	Men	singles	M	Gold
21787	Atlanta	1996	Badminton	Badminton	HOYER-LARSEN, Poul Erik	DEN	Men	singles	M	Gold
23717	Sydney	2000	Badminton	Badminton	Ji, Xinpeng	CHN	Men	singles	M	Gold
27741	Beijing	2008	Badminton	Badminton	LIN, Dan	CHN	Men	singles	M	Gold

In [15]: `olympic_data.query("(Medal=='Gold')and(Gender=='Men')and(Event=='singles')and(Discipline=='Badminton')").sort_values(by=['Athlete']).NOC.value_counts()[1]`  
Out[15]: `INA 2  
Name: NOC, dtype: int64`

In [16]: `data_1984_2008=olympic_data.set_index(['Edition']).loc[1984:2009]  
data_1984_2008.NOC.value_counts()[3]`  
Out[16]: `USA 1837  
AUS 762  
GER 691  
Name: NOC, dtype: int64`

In [17]: `olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')")`  
Out[17]:

	City	Edition	Sport	Discipline	Athlete	NOC	Gender	Event	Event_gender	Medal
13	Athens	1896	Athletics	Athletics	BURKE, Thomas	USA	Men	100m	M	Gold
231	Paris	1900	Athletics	Athletics	JARVIS, Francis	USA	Men	100m	M	Gold
737	St Louis	1904	Athletics	Athletics	HAHN, Archie	USA	Men	100m	M	Gold
1191	London	1908	Athletics	Athletics	WALKER, Reginald	RSA	Men	100m	M	Gold
2022	Stockholm	1912	Athletics	Athletics	CRAIG, Ralph	USA	Men	100m	M	Gold
2996	Antwerp	1920	Athletics	Athletics	PADDOCK, Charles	USA	Men	100m	M	Gold
4236	Paris	1924	Athletics	Athletics	ABRAHAMAS, Harold	GBR	Men	100m	M	Gold
5095	Amsterdam	1928	Athletics	Athletics	WILLIAMS, Percy	CAN	Men	100m	M	Gold
5806	Los Angeles	1932	Athletics	Athletics	TOLAN, Eddie	USA	Men	100m	M	Gold
6427	Berlin	1936	Athletics	Athletics	OWENS, Jesse	USA	Men	100m	M	Gold
7302	London	1948	Athletics	Athletics	DILLARD, Harrison	USA	Men	100m	M	Gold
8121	Helsinki	1952	Athletics	Athletics	REMIGINO, Lindy	USA	Men	100m	M	Gold
9009	Melbourne / Stockholm	1956	Athletics	Athletics	MORROW, Robert Joseph	USA	Men	100m	M	Gold
9924	Rome	1960	Athletics	Athletics	HARY, Armin	EUA	Men	100m	M	Gold
10823	Tokyo	1964	Athletics	Athletics	HAYES, Robert	USA	Men	100m	M	Gold
11865	Mexico	1968	Athletics	Athletics	HINES, James Ray	USA	Men	100m	M	Gold
12902	Munich	1972	Athletics	Athletics	BORZOV, Valery	URS	Men	100m	M	Gold
14069	Montreal	1976	Athletics	Athletics	CRAWFORD, Hasely	TRI	Men	100m	M	Gold
15374	Moscow	1980	Athletics	Athletics	WELLS, Allan	GBR	Men	100m	M	Gold
16794	Los Angeles	1984	Athletics	Athletics	LEWIS, Carl	USA	Men	100m	M	Gold
18284	Seoul	1988	Athletics	Athletics	LEWIS, Carl	USA	Men	100m	M	Gold
19859	Barcelona	1992	Athletics	Athletics	CHRISTIE, Linford	GBR	Men	100m	M	Gold
21598	Atlanta	1996	Athletics	Athletics	BAILEY, Donovan	CAN	Men	100m	M	Gold
23521	Sydney	2000	Athletics	Athletics	GREENE, Maurice	USA	Men	100m	M	Gold
25539	Athens	2004	Athletics	Athletics	GATLIN, Justin	USA	Men	100m	M	Gold
27552	Beijing	2008	Athletics	Athletics	BOLT, Usain	JAM	Men	100m	M	Gold

In [18]: `olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')").sort_values(['Edition'],ascending=False)`  
Out[18]:

	City	Edition	Sport	Discipline	Athlete	NOC	Gender	Event	Event_gender	Medal
27552	Beijing	2008	Athletics	Athletics	BOLT, Usain	JAM	Men	100m	M	Gold
25539	Athens	2004	Athletics	Athletics	GATLIN, Justin	USA	Men	100m	M	Gold
23521	Sydney	2000	Athletics	Athletics	GREENE, Maurice	USA	Men	100m	M	Gold
21598	Atlanta	1996	Athletics	Athletics	BAILEY, Donovan	CAN	Men	100m	M	Gold
19859	Barcelona	1992	Athletics	Athletics	CHRISTIE, Linford	GBR	Men	100m	M	Gold
18284	Seoul	1988	Athletics	Athletics	LEWIS, Carl	USA	Men	100m	M	Gold
16794	Los Angeles	1984	Athletics	Athletics	LEWIS, Carl	USA	Men	100m	M	Gold
15374	Moscow	1980	Athletics	Athletics	WELLS, Allan	GBR	Men	100m	M	Gold
14069	Montreal	1976	Athletics	Athletics	CRAWFORD, Hasely	TRI	Men	100m	M	Gold
12902	Munich	1972	Athletics	Athletics	BORZOV, Valery	URS	Men	100m	M	Gold
11865	Mexico	1968	Athletics	Athletics	HINES, James Ray	USA	Men	100m	M	Gold
10823	Tokyo	1964	Athletics	Athletics	HAYES, Robert	USA	Men	100m	M	Gold
9924	Rome	1960	Athletics	Athletics	HARY, Armin	EUA	Men	100m	M	Gold
9009	Melbourne / Stockholm	1956	Athletics	Athletics	MORROW, Robert Joseph	USA	Men	100m	M	Gold
8121	Helsinki	1952	Athletics	Athletics	REMIGINO, Lindy	USA	Men	100m	M	Gold
7302	London	1948	Athletics	Athletics	DILLARD, Harrison	USA	Men	100m	M	Gold
6427	Berlin	1936	Athletics	Athletics	OWENS, Jesse	USA	Men	100m	M	Gold
5806	Los Angeles	1932	Athletics	Athletics	TOLAN, Eddie	USA	Men	100m	M	Gold
5095	Amsterdam	1928	Athletics	Athletics	WILLIAMS, Percy	CAN	Men	100m	M	Gold
4236	Paris	1924	Athletics	Athletics	ABRAHAMAS, Harold	GBR	Men	100m	M	Gold
2996	Antwerp	1920	Athletics	Athletics	PADDOCK, Charles	USA	Men	100m	M	Gold
2022	Stockholm	1912	Athletics	Athletics	CRAIG, Ralph	USA	Men	100m	M	Gold
1191	London	1908	Athletics	Athletics	WALKER, Reginald	RSA	Men	100m	M	Gold
737	St Louis	1904	Athletics	Athletics	HAHN, Archie	USA	Men	100m	M	Gold
231	Paris	1900	Athletics	Athletics	JARVIS, Francis	USA	Men	100m	M	Gold
13	Athens	1896	Athletics	Athletics	BURKE, Thomas	USA	Men	100m	M	Gold

In [23]: `olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')").sort_values(['Edition'],ascending=False).loc[:,['City','Edition','Athlete'],]`

**Input In [23]**

```
olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')").sort_values(['Edition'],ascending=False).loc[:,['City','Edition','Athlete'],]
```

**SyntaxError:** unexpected EOF while parsing

In [24]: `olympic_data.query("(Medal=='Gold')and(Event=='100m')and(Discipline=='Athletics')and(Gender=='Men')").sort_values(['Edition'],ascending=False).loc[:,['City','Edition','Athlete'],'NOC']`  
Out[24]:

	City	Edition	Athlete	NOC
27552	Beijing	2008	BOLT, Usain	JAM
25539	Athens	2004	GATLIN, Justin	USA
23521	Sydney	2000	GREENE, Maurice	USA
21598	Atlanta	1996	BAILEY, Donovan	CAN
19859	Barcelona	1992	CHRISTIE, Linford	GBR
18284	Seoul	1988	LEWIS, Carl	USA
16794	Los Angeles	1984	LEWIS, Carl	USA
15374	Moscow	1980	WELLS, Allan	GBR
14069	Montreal	1976	CRAWFORD, Hasely	TRI
12902	Munich	1972	BORZOV, Valery	URS
11865	Mexico	1968	HINES, James Ray	USA
10823	Tokyo	1964	HAYES, Robert	USA
9924	Rome	1960	HARY, Armin	EUA
9009	Melbourne / Stockholm	1956	MORROW, Robert Joseph	USA
8121	Helsinki	1952	REMIGINO, Lindy	USA
7302	London	1948	DILLARD, Harrison	USA
6427	Berlin	1936	OWENS, Jesse	USA
5806	Los Angeles	1932	TOLAN, Eddie	USA
5095	Amsterdam	1928	WILLIAMS, Percy	CAN
4236	Paris	1924	ABRAHAMAS, Harold	GBR
2996	Antwerp	1920	PADDOCK, Charles	USA
2022	Stockholm	1912	CRAIG, Ralph	USA
1191	London	1908	WALKER, Reginald	RSA
737	St Louis	1904	HAHN, Archie	USA
231	Paris	1900	JARVIS, Francis	USA
13	Athens	1896	BURKE, Thomas	USA