

Olympic data problem

Q.1 In which events did JESSE OWENS won a medal

```
In [1]: import pandas as pd
olympic_data=pd.read_csv("https://raw.githubusercontent.com/svkarthik86/Advance-Python-Numpy/main/olympics.csv", skiprows=4)
olympic_data
```

Out[1]:

	City	Edition	Sport	Discipline	Athlete	NOC	Gender	Event	Event_gender	Medal	
	0	Athens	1896	Aquatics	Swimming	HAJOS, Alfred	HUN	Men	100m freestyle	M	Gold
	1	Athens	1896	Aquatics	Swimming	HERSCHMANN, Otto	AUT	Men	100m freestyle	M	Silver
	2	Athens	1896	Aquatics	Swimming	DRIVAS, Dimitrios	GRE	Men	100m freestyle for sailors	M	Bronze
	3	Athens	1896	Aquatics	Swimming	MALOKINIS, Ioannis	GRE	Men	100m freestyle for sailors	M	Gold
	4	Athens	1896	Aquatics	Swimming	CHASAPIS, Spiridon	GRE	Men	100m freestyle for sailors	M	Silver
	...	...	...	...	...	...	...	...	...	...	...
	29211	Beijing	2008	Wrestling	Wrestling Gre-R	ENGLISH, Mirko	GER	Men	84 - 96kg	M	Silver
	29212	Beijing	2008	Wrestling	Wrestling Gre-R	MIZGAITIS, Mindaugas	LTU	Men	96 - 120kg	M	Bronze
	29213	Beijing	2008	Wrestling	Wrestling Gre-R	PATRIKEEV, Yuri	ARM	Men	96 - 120kg	M	Bronze
	29214	Beijing	2008	Wrestling	Wrestling Gre-R	LOPEZ, Mijain	CUB	Men	96 - 120kg	M	Gold
	29215	Beijing	2008	Wrestling	Wrestling Gre-R	BAROEV, Khasan	RUS	Men	96 - 120kg	M	Silver

29216 rows × 10 columns

```
In [2]: olympic_data[olympic_data.Athlete.str.contains('OWENS')].Event.values
```

```
Out[2]: array(['100m', '200m', '4x100m relay', 'long jump'], dtype=object)
```

Q.2 Countries which won most gold medal in singles badminton

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In [3]: olympic_data[(olympic_data.Medal=='Gold')&(olympic_data.Gender=='Men')&(olympic_data.Event=='singles')&(olympic_data.Discipline=='Badminton')].sort_values(['Athlete'])
```

Out[3]:

	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

Q.3 Countries which receives most medals sorted from recent years

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In [4]: olympic_data[(olympic_data.Edition>=1984)&(olympic_data.Edition<=1984)][["NOC"]].value_counts().head(3)
```

```
Out[4]: USA      333
FRG       157
ROU       106
Name: NOC, dtype: int64
```

Q.4 List of gold medal winners-male in 100m track event

```
In [5]: olympic=olympic_data[(olympic_data.Medal=='Gold')&(olympic_data.Gender=='Men')&(olympic_data.Event=='100m')&(olympic_data.Discipline=='Athletics')]
olympic
```

Out[5]:

	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	ABRAHAMS, 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 [6]: olympic=olympic.sort_values(by=['Edition'],ascending=False)
olympic
```

Out[6]:

	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	ABRAHAMS, 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

Sliced data for specified columns

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In [7]: olympic[['City','Edition','Athlete','NOC']]
```

Out[7]:

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