



دانشگاه سبزگان

گزارشکار تمرین دوم آزمایشگاه پایگاه داده

استاد: آرش یوسفی

گروه ۱

تمرین تحقیقی:

برای import کردن فایل‌ها از طریق psql، می‌توان از دستور زیر استفاده کرد:

```
\copy <TableName> from '<TableAddress>';
```

طبق تصویر زیر، با ساختن یک دیتابیس جدید به نام "hw2" و ساختن جدول‌ها، با وارد کردن این دستور در psql، می‌بینیم که فایل نمونه "reviews.txt" با موفقیت تمامی سطرهای آن import شده است.

```
hw2=# \copy reviews from 'C:\Users\Parsa\Desktop\reviews.txt';  
COPY 4968
```

و با زدن query زیر از import شدن فایل اطمینان حاصل می‌کنیم:

```
hw2=# select * from reviews;
```

id	film_id	num_user	num_critic	imdb_score	num_votes	facebook_likes
1	3934	588	432	7.1	203461	46000
2	3405	285	267	6.4	149998	0
3	478	65	29	3.2	8465	491
4	74	83	25	7.6	7071	930
5	1254	1437	224	8	241030	13000
6	740	111	64	6.4	64742	0
7	4841	1058	579	8.1	479047	117000
8	2869	59	104	6.8	18442	689
9	3252	117	160	7.2	49855	10000
10	1181	163	99	7.3	16995	0
11	2020	402	145	6.7	91092	0
12	4152	371	359	5.9	108242	39000
13	3220	62	64	6.2	15780	2000
14	2312	251	161	5.8	63912	912
15	1820	113	41	7	8535	872
16	718	85	43	6.4	76850	1000
17	831	107	65	6.6	40126	975
18	1231	226	113	6.5	26034	0
19	1746	125	71	6.6	17261	455
20	3508	43	10	5.3	8598	250
21	1621	181	93	6	44913	3000
22	3197	143	128	4.8	33088	0

تمرین‌های SQL Query:

سوال (۱)

Query

Query History

```
1 select title from films;
```

Scratch Pad x

Data Output

Messages

Notifications

title

character varying

1

Intolerance: Love's Struggle Throughout the Ages

2

Over the Hill to the Poorhouse

3

The Big Parade

4

Metropolis

5

Pandora's Box

6

The Broadway Melody

7

Hell's Angels

Total rows: 1000 of 4968

Query complete 00:00:00.142

Ln 1, Col 24

سوال (۲) حاصل گرد شده‌ی تقسیم عدد ۱۰ بر ۳ را خروجی می‌دهد.

Query

Query History

```
1 SELECT (10 / 3);
```

Scratch Pad x

Data Output

Messages

Notifications

?column?

integer

1

3

Total rows: 1 of 1

Query complete 00:00:00.069

Ln 1, Col 17

سوال (۳)

Query

Query History

Scratch Pad

1 select release_year from films;

Data Output

Messages

Notifications

release_year
integer

1 1916

2 1920

3 1925

4 1927

5 1929

6 1929

7 1930

8 1930

9 1930

10 1930

Total rows: 1000 of 4968 Query complete 00:00:00.077 Ln 1, Col 20

سوال (۴)

Query

Query History

Scratch Pad

1 select name from people;

Data Output

Messages

Notifications

name
character varying

1 50 Cent

2 A. Michael Baldwin

3 A. Raven Cruz

4 A.J. Buckley

5 A.J. DeLucia

6 A.J. Langer

7 Aaliyah

8 Aaliyah

9 Aaliyah

10 Aaliyah

Total rows: 1000 of 8397 Query complete 00:00:00.063 Ln 1, Col 22

سوال ۵)

Query	Query History	Scratch Pad
1	<code>select title from films;</code>	
Data Output		Messages
Notifications		
title character varying		
1	Intolerance: Love's Struggle Throughout the Ages	
2	Over the Hill to the Poorhouse	
3	The Big Parade	
4	Metropolis	
5	Pandora's Box	
6	The Broadway Melody	
7	Hell's Angels	
Total rows: 1000 of 4968		Query complete 00:00:00.142
		Ln 1, Col 24

سوال ۶)

Query	Query History	Scratch Pad
1	<code>select title, release_year from films;</code>	
Data Output		Messages
Notifications		
title character varying		release_year integer
1	Intolerance: Love's Struggle Throughout the Ages	1916
2	Over the Hill to the Poorhouse	1920
3	The Big Parade	1925
4	Metropolis	1927
5	Pandora's Box	1929
6	The Broadway Melody	1929
7	Hell's Angels	1930
Total rows: 1000 of 4968		Query complete 00:00:00.073
		Ln 1, Col 14

سوال (۷)

Query

Query History

Scratch Pad

1

```
select title, release_year, country from films;
```

Data Output

Messages

Notifications

	title character varying	release_year integer	country character varying
1	Intolerance: Love's Struggle Throughout the Ages	1916	USA
2	Over the Hill to the Poorhouse	1920	USA
3	The Big Parade	1925	USA
4	Metropolis	1927	Germany
5	Pandora's Box	1929	Germany
6	The Broadway Melody	1929	USA
7	Hell's Angels	1930	USA

Total rows: 1000 of 4968

Query complete 00:00:00.096

Ln 1, Col 36

سوال (۸)

Query

Query History

Scratch Pad

1

```
select * from films;
```

Data Output

Messages

Notifications

	id [PK] integer	title character varying	release_year integer	country character varying	duration integer	la cl
1	1	Intolerance: Love's Struggle Throughout the Ages	1916	USA	123	[i]
2	2	Over the Hill to the Poorhouse	1920	USA	110	[i]
3	3	The Big Parade	1925	USA	151	[i]
4	4	Metropolis	1927	Germany	145	G
5	5	Pandora's Box	1929	Germany	110	G
6	6	The Broadway Melody	1929	USA	100	E
7	7	Hell's Angels	1930	USA	96	E

Total rows: 1000 of 4968

Query complete 00:00:00.081

Ln 1, Col 9

سوال ۹

Query

Query History

Scratch Pad

1 select distinct(country) from films where country IS NOT NULL;

Data Output

Messages

Notifications

country

character varying

1 Soviet Union

2 Indonesia

3 Italy

4 Cameroon

5 Czech Republic

6 Sweden

7 USA

Total rows: 64 of 64

Query complete 00:00:00.060

Ln 1, Col 62

سوال ۱۰

Query

Query History

Scratch Pad

1 select certification from films;

Data Output

Messages

Notifications

certification

character varying

1 Not Rated

2 [null]

3 Not Rated

4 Not Rated

5 Not Rated

6 Passed

7 Passed

Total rows: 1000 of 4968

Query complete 00:00:00.128

Ln 1, Col 21

سوال ۱۱

Query

Query History

Scratch Pad x

1 select role from roles;

Data Output

Messages

Notifications

role

character varying

1 director

2 actor

3 actor

4 actor

5 director

6 actor

7 actor

Total rows: 1000 of 19791

Query complete 00:00:00.169

Ln 1, Col 12

سوال ۱۲

Query

Query History

Scratch Pad x

1 select count(*) from people;

Data Output

Messages

Notifications

count

bigint

1 8397

Total rows: 1 of 1

Query complete 00:00:00.063

Ln 1, Col 15

سوال ۱۳

Query

Query History

Scratch Pad x

1 select count(*) from people where birthdate IS NOT NULL;

Data Output

Messages

Notifications

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	count bigint	🔒
1	6152	

Total rows: 1 of 1 Query complete 00:00:00.124 Ln 1, Col 15

سوال ۱۴

Query

Query History

Scratch Pad x

1 select count(distinct(birthdate)) from people;

Data Output

Messages

Notifications

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	count bigint	🔒
1	5398	

Total rows: 1 of 1 Query complete 00:00:00.142 Ln 1, Col 34

سوال ۱۵

Query

Query History

Scratch Pad

1 select count(distinct(country)) from films;

Data Output

Messages

Notifications

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	count bigint
1	64

Total rows: 1 of 1 Query complete 00:00:00.060 Ln 1, Col 43

سوال ۱۶

Query

Query History

Scratch Pad

1 select * from films where release_year = 2016;

Data Output

Messages

Notifications

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	id [PK] integer	title character varying	release_year integer	country character varying	duration integer	language character varying	ce ch
1	4821	10 Cloverfield Lane	2016	USA	104	English	P
2	4822	13 Hours	2016	USA	144	English	R
3	4823	A Beginner's Guide to Snuff	2016	USA	87	English	[n
4	4824	Airlift	2016	India	130	Hindi	[n
5	4825	Alice Through the Looking Glass	2016	USA	113	English	P
6	4826	Allegiant	2016	USA	120	English	P
7	4827	Alleluia! The Devil's Carnival	2016	USA	97	English	[n

Total rows: 106 of 106 Query complete 00:00:00.092 Ln 1, Col 46

سوال ۱۲

Query

Query History

Scratch Pad x

1 select count(*) from films where release_year < 2000;

Data Output

Messages

Notifications

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	count bigint	🔒
1	1337	

Total rows: 1 of 1 Query complete 00:00:00.061 Ln 1, Col 35

سوال ۱۸

Query

Query History

Scratch Pad x

1 select title, release_year from films where release_year > 2000;

Data Output

Messages

Notifications

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	title character varying	release_year integer	🔒
1	15 Minutes	2001	
2	3000 Miles to Graceland	2001	
3	A Beautiful Mind	2001	
4	A Knight's Tale	2001	
5	A.I. Artificial Intelligence	2001	
6	Ali	2001	
7	Alias Betty	2001	
8	All the Queen's Men	2001	

Total rows: 1000 of 3418 Query complete 00:00:00.087 Ln 1, Col 27

سوال ۱۹

Query

Query History

Scratch Pad

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1 `select * from films where language = 'French';`

Data Output

Messages

Notifications

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	id [PK] integer	title character varying	release_year integer	country character varying	duration integer	language character varying	certificati character
1	108	Une Femme Mariée	1964	France	94	French	[null]
2	111	Pierrot le Fou	1965	France	110	French	Not Rated
3	140	Mississippi Mermaid	1969	France	123	French	R
4	423	Subway	1985	France	98	French	R
5	662	Les visiteurs	1993	France	107	French	R
6	801	The Horseman on the Roof	1995	France	135	French	R
7	916	When the Cat's Away	1996	France	91	French	R

Total rows: 72 of 72 Query complete 00:00:00.141 Ln 1, Col 46

سوال ۲۰

Query

Query History

1 `select name, birthdate from people where birthdate = '1974-11-11';`

Data Output

Messages

Notifications

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	name character varying	birthdate date
1	Leonardo DiCaprio	1974-11-11

سوال ۲۱

Query

Query History

Scratch Pad

```
1 select count(*) from films where language = 'Hindi';
2
```

Data Output

Messages

Notifications

count

bigint

1

28

Total rows: 1 of 1

Query complete 00:00:00.193

Ln 1, Col 51

سوال ۲۲

Query

Query History

Scratch Pad

```
1 select * from films where certification = 'R';
2
```

Data Output

Messages

Notifications

	release_year	country	duration	language	certification	gross	budget
	integer	character varying	integer	character varying	character varying	bigint	bigint
1	1960	USA	108	English	R	32000000	806947
2	1964	Italy	99	Italian	R	3500000	200000
3	1968	USA	136	English	R	[null]	2300000
4	1969	France	123	French	R	26893	1600000
5	1969	USA	144	English	R	[null]	6244087
6	1970	USA	122	English	R	[null]	18000000
7	1970	USA	97	English	R	[null]	1200000

Total rows: 1000 of 2118

Query complete 00:00:00.114

Ln 1, Col 45

سوال ۲۳

Query

Query History

```
1 select title, release_year from films where language = 'Spanish' and release_year < 2000;
2
```

Data Output

Messages

Notifications

	title character varying	release_year integer
1	El Mariachi	1992
2	La otra conquista	1998
3	Tango	1998

Total rows: 3 of 3

Query complete 00:00:00.059

Ln 1, Col 27

سوال ۲۴

Query

Query History

```
1 select title, release_year from films where release_year >= 1990 and release_year < 2000;
2
```

Data Output

Messages

Notifications

	title character varying	release_year integer
1	Arachnophobia	1990
2	Back to the Future Part III	1990
3	Child's Play 2	1990
4	Dances with Wolves	1990
5	Days of Thunder	1990
6	Dick Tracy	1990
7	Die Hard 2	1990
8	Edward Scissorhands	1990

Total rows: 786 of 786

Query complete 00:00:00.126

Ln 1, Col 89

سوال ۲۵

Query

Query History

↗

1

```
select title, release_year from films where release_year >= 1990 and release_year < 2000;
```

2

Data Output

Messages

Notifications

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	title	release_year
	character varying	integer
1	Arachnophobia	1990
2	Back to the Future Part III	1990
3	Child's Play 2	1990
4	Dances with Wolves	1990
5	Days of Thunder	1990
6	Dick Tracy	1990
7	Die Hard 2	1990
8	Edward Scissorhands	1990

Total rows: 786 of 786 Query complete 00:00:00.126 Ln 1, Col 84

سوال ۲۶

Query

Query History

↗

1

```
select title, release_year from films where (release_year=1990 OR release_year=2000) AND duration > 120;
```

Data Output

Messages

Notifications

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	title	release_year
	character varying	integer
1	Dances with Wolves	1990
2	Die Hard 2	1990
3	Ghost	1990
4	Goodfellas	1990
5	Mo' Better Blues	1990
6	Pretty Woman	1990
7	The Godfather: Part III	1990
8	The Hunt for Red October	1990

Total rows: 42 of 42 Query complete 00:00:00.075 Ln 1, Col 27

سوال ۲۷

Query

Query History

```
1 select name from people where deathdate IS NULL;
```

Data Output

Messages

Notifications

name

character varying

1

50 Cent

2

A. Michael Baldwin

3

A. Raven Cruz

4

A.J. Buckley

5

A.J. DeLucia

6

A.J. Langer

7

Aaron Ashmore

8

Aaron Hann

Total rows: 1000 of 7610

Query complete 00:00:00.122

Ln 1, Col 48

سوال ۲۸

Query

Query History

```
1 select count(*) from films where language IS NULL;
```

Data Output

Messages

Notifications

count

bigint

1

11

سوال ۲۹

Query

Query History

↗

1 select name from people where name like 'B%';

Data Output

Messages

Notifications

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	name	
	character varying	🔒
1	B.J. Novak	
2	Babak Najafi	
3	Babar Ahmed	
4	Bahare Seddiqi	
5	Bai Ling	
6	Bailee Madison	
7	Balinese Tari Legong Dancers	
8	Bálint Péntek	

Total rows: 445 of 445 Query complete 00:00:00.093 Ln 1, Col 43

سوال ۳۰

Query

Query History

↗

1 select name from people where name like '_r%';

Data Output

Messages

Notifications

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	name	
	character varying	🔒
1	Ara Celi	
2	Aramis Knight	
3	Arben Bajraktaraj	
4	Arcelia Ramírez	
5	Archie Kao	
6	Archie Panjabi	
7	Aretha Franklin	
8	Ari Folman	

Total rows: 531 of 531 Query complete 00:00:00.079 Ln 1, Col 44

سوال (۳۱)

Query

Query History

↗

1 select SUM(duration) from films;

Data Output

Messages

Notifications

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	sum bigint	🔒
1	534882	

Total rows: 1 of 1 Query complete 00:00:00.060 Ln 1, Col 32

سوال (۳۲)

Query

Query History

↗

1 select MAX(duration) from films;

Data Output

Messages

Notifications

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	max integer	🔒
1	334	

سوال ۳۳

Query

Query History

↗

1 `select AVG(duration) from films;`

Data Output

Messages

Notifications

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	avg	numeric	🔒
1	107.9479313824419778		

سوال ۳۴

Query

Query History

↗

1 `select SUM(budget) from films where release_year >= 2000;`

Data Output

Messages

Notifications

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	sum	numeric	🔒
1	146314637169		

سوال ۳۵

Query

Query History

↗

1 select AVG(budget) from films;

Data Output

Messages

Notifications

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	avg numeric	🔒
1	39902826.268400176289	

سوال ۳۶

Query

Query History

↗

1 select AVG(budget) from films where title like 'A%';

Data Output

Messages

Notifications

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	avg numeric	🔒
1	35371983.622448979592	

سوال ۳۷

Query

Query History

↗

1 `select MIN(budget) from films where release_year = 1994;`

Data Output

Messages

Notifications

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	min bigint	🔒
1	230000	

سوال ۳۸

Query

Query History

↗

1 `select MAX(budget) from films where release_year > 2000 and release_year <= 2012;`

Data Output

Messages

Notifications

↗

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	max bigint	🔒
1	1221550000	

سوال ۳۹

Query

Query History

1 `select count(deathdate) * 100.0 / SUM(1) AS percentage_dead from people;`

Data Output

Messages

Notifications

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	percentage_dead numeric	🔒
1	9.3723949029415267	

سوال ۴۰

Query

Query History

↗️

1 `select (MAX(release_year)-MIN(release_year)) / 10 from films;`

Data Output

Messages

Notifications

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	?column? integer	🔒
1	10	

سوال (۴۱)

Query

Query History

```
1 select * from films where certification != 'R';
```

Data Output

Messages

Notifications

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	release_year integer	country character varying	duration integer	language character varying	certification character varying	gross bigint	budget bigint
1	1916	USA	123	[null]	Not Rated	[null]	385907
2	1925	USA	151	[null]	Not Rated	[null]	245000
3	1927	Germany	145	German	Not Rated	26435	6000000
4	1929	Germany	110	German	Not Rated	9950	[null]
5	1929	USA	100	English	Passed	2808000	379000
6	1930	USA	96	English	Passed	[null]	3950000
7	1932	USA	79	English	Unrated	[null]	800000

سوال ۴۲)

Query

Query History

1

```
select title, (budget-gross) AS net_profit from films;
```

Data Output

Messages

Notifications

	title character varying	net_profit bigint
1	Intolerance: Love's Struggle Throughout the Ages	[null]
2	Over the Hill to the Poorhouse	-2900000
3	The Big Parade	[null]
4	Metropolis	5973565
5	Pandora's Box	[null]
6	The Broadway Melody	-2429000
7	Hell's Angels	[null]
8	A Farewell to Arms	[null]

سوال ٤٣

Query

Query History

1 select title, (duration/60.0) AS duration_hours from films;

Data Output

Messages

Notifications

	title character varying	duration_hours numeric	
1	Intolerance: Love's Struggle Throughout the Ages	2.0500000000000000	
2	Over the Hill to the Poorhouse	1.8333333333333333	
3	The Big Parade	2.5166666666666667	
4	Metropolis	2.4166666666666667	
5	Pandora's Box	1.8333333333333333	
6	The Broadway Melody	1.6666666666666667	
7	Hell's Angels	1.6000000000000000	
8	A Farewell to Arms	1.3166666666666667	

سوال ٤٤

Query

Query History

1

select AVG(duration/60.0) AS avg_duration_hours from films;

Data Output

Messages

Notifications

avg_duration_hours

numeric

1

1.79913218970736629689

سوال ٤٥

Query

Query History

↗

1 `select name from people ORDER BY name ASC;`

Data Output

Messages

Notifications

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	name character varying	🔒
1	50 Cent	
2	A. Michael Baldwin	
3	A. Raven Cruz	
4	A.J. Buckley	
5	A.J. DeLucia	
6	A.J. Langer	
7	Aaliyah	
8	Aaron Ashmore	

سوال ٤٦

Query

Query History

↗

1 `select name from people ORDER BY birthdate ASC;`

Data Output

Messages

Notifications

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	name character varying	🔒
1	Robert Shaw	
2	Lucille La Verne	
3	Mary Carr	
4	D.W. Griffith	
5	Finlay Currie	
6	Lionel Barrymore	
7	Billy Gilbert	
8	Cecil B. DeMille	

سوال ٤٧

Query

Query History

↗

```
1 select birthdate, name from people ORDER BY birthdate ASC;
```

Data Output

Messages

Notifications

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	birthdate date	name character varying
1	1837-10-10	Robert Shaw
2	1872-11-07	Lucille La Verne
3	1874-03-14	Mary Carr
4	1875-01-22	D.W. Griffith
5	1878-01-20	Finlay Currie
6	1878-04-28	Lionel Barrymore
7	1880-03-21	Billy Gilbert
8	1881-08-12	Cecil B. DeMille

سوال ٤٨

Query

Query History

↗

```
1 select title from films where (release_year = 2000 OR release_year = 2012) ORDER BY release_year ASC;
```

Data Output

Messages

Notifications

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	title character varying
1	102 Dalmatians
2	28 Days
3	3 Strikes
4	Aberdeen
5	All the Pretty Horses
6	Almost Famous
7	American Psycho
8	Amores Perros

سوال ۴۹)

Query

Query History

```
1 select * from films where release_year != 2015 ORDER BY duration ASC;
```

Data Output

Messages

Notifications

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	id [PK] integer	title character varying	release_year integer	country character varying	duration integer	language character
2	4098	Vessel	2012	USA	14	Engl
3	2501	Wal-Mart: The High Cost of Low Price	2005	USA	20	Engl
4	566	Marilyn Hotchkiss' Ballroom Dancing and Charm School	1990	USA	34	Engl
5	2829	Jesus People	2007	USA	35	Engl
6	462	Evil Dead II	1987	USA	37	Engl
7	3579	Sea Rex 3D: Journey to a Prehistoric World	2010	UK	41	Engl
8	2985	Dolphins and Whales 3D: Tribes of the Ocean	2008	UK	42	Engl
9	2827	Flame and Citron	2009	Denmark	45	Den

سوال ۵۰)

Query

Query History

```
1 select title, gross from films where title like 'M%' ORDER BY title ASC;
```

Data Output

Messages

Notifications

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	title character varying	gross bigint
1	MacGruber	8460995
2	Machete	26589953
3	Machete Kills	7268659
4	Machine Gun McCain	[null]
5	Machine Gun Preacher	537580
6	Mad City	10556196
7	Mad Hot Ballroom	8044906

سوال (۵۱)

Query

Query History

↗

1 `select imdb_score, film_id from reviews ORDER BY imdb_score DESC;`

Data Output

Messages

Notifications

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	imdb_score real	film_id integer
1	9.5	4960
2	9.3	742
3	9.2	178
4	9.1	4866
5	9	3110
6	9	192
7	8.9	676
8	8.9	69

سوال (۵۲)

Query

Query History

↗

1 `select title, duration from films where duration IS NOT NULL ORDER BY duration DESC;`

Data Output

Messages

Notifications

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	title character varying	duration integer
1	Carlos	334
2	Blood In, Blood Out	330
3	Heaven's Gate	325
4	The Legend of Suriyothai	300
5	Das Boot	293
6	Apocalypse Now	289
7	The Company	286
8	Gods and Generals	280

سوال ۵۳

Query

Query History

1 `select birthdate, name from people where birthdate IS NOT NULL ORDER BY name ASC;`

Data Output

Messages

Notifications

	birthdate date	name character varying
1	1975-07-06	50 Cent
2	1963-04-04	A. Michael Baldwin
3	1978-02-09	A.J. Buckley
4	1974-05-22	A.J. Langer
5	1979-01-16	Aaliyah
6	1979-10-07	Aaron Ashmore
7	1983-04-23	Aaron Hill
8	1965-10-26	Aaron Kwok

سوال ۵۴

Query

Query History

1 `select certification, release_year from films ORDER BY certification ASC;`

Data Output

Messages

Notifications

	certification character varying	release_year integer
1	Approved	1936
2	Approved	1953
3	Approved	1935
4	Approved	1964
5	Approved	1963
6	Approved	1949
7	Approved	1967
8	Approved	1933

سوال ۵۵

Query	Query History	
1	<code>SELECT release_year, COUNT(*) AS film_count FROM films GROUP BY release_year ORDER BY release_year ASC;</code>	
2		

Data Output	Messages	Notifications	
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>			
	release_year integer	film_count bigint	
1	1916	1	
2	1920	1	
3	1925	1	
4	1927	1	
5	1929	2	
6	1930	1	
7	1932	1	
8	1933	2	

سوال ۵۶

Query	Query History	
1	<code>SELECT release_year, AVG(duration) AS average_duration from films GROUP BY release_year ORDER BY release_year ASC;</code>	

Data Output	Messages	Notifications	
<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>			
	release_year integer	average_duration numeric	
1	1916	123.0000000000000000	
2	1920	110.0000000000000000	
3	1925	151.0000000000000000	
4	1927	145.0000000000000000	
5	1929	105.0000000000000000	
6	1930	96.0000000000000000	
7	1932	79.0000000000000000	
8	1933	77.5000000000000000	

سوال ۵۷

Query

Query History

1

SELECT release_year, MAX(budget) as Max_Budget from films GROUP BY release_year ORDER BY release_year ASC;

Data Output

Messages

Notifications

release_year

integer

max_budget

bigint

1

1916

385907

2

1920

100000

3

1925

245000

4

1927

6000000

5

1929

379000

6

1930

3950000

7

1932

800000

8

1933

439000

سوال ۵۸

Query

Query History

1

SELECT language, (SUM(budget) - SUM(gross)) as total_gross_income from films GROUP BY language ORDER BY language ASC;

Data Output

Messages

Notifications

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سوال ۵۹

Query Query History

```
1 SELECT release_year, country, MAX(budget) AS max_budget from films group by release_year, country order by release_year, country ASC;
```

Data Output Messages Notifications

	release_year integer	country character varying	max_budget bigint
1	1916	USA	385907
2	1920	USA	100000
3	1925	USA	245000
4	1927	Germany	6000000
5	1929	Germany	[null]
6	1929	USA	379000
7	1930	USA	3950000
8	1932	USA	800000

سوال ۶۰

Query Query History

```
1 SELECT release_year, count(*) AS total_films from cinema.films group by release_year having count(*) > 200 order by release_year ASC
```

Data Output Messages Notifications

	release_year integer	country character varying	max_budget bigint
1	1916	USA	385907
2	1920	USA	100000
3	1925	USA	245000
4	1927	Germany	6000000
5	1929	Germany	[null]
6	1929	USA	379000
7	1930	USA	3950000
8	1932	USA	800000

سوال (٦١)

Query

Query History

```
1 select country, AVG(budget) as avg_budget, AVG(gross) as avg_gross, count(*) from films
2 group by country
3 having count(*)>10
4 order by country asc limit 5;
```

Data Output

Messages

Notifications

	country character varying	avg_budget numeric	avg_gross numeric	count bigint
1	Australia	31172110.460000000000	40205909.571428571429	55
2	Canada	14798458.715596330275	22432066.680555555556	123
3	China	62219000.000000000000	14143040.736842105263	30
4	Denmark	13922222.222222222222	1418469.111111111111	11
5	France	30672034.615384615385	16350593.578512396694	153