

**Challenges for Querying Big Data**

Computer Science

*f(x)*

*the computation of function*

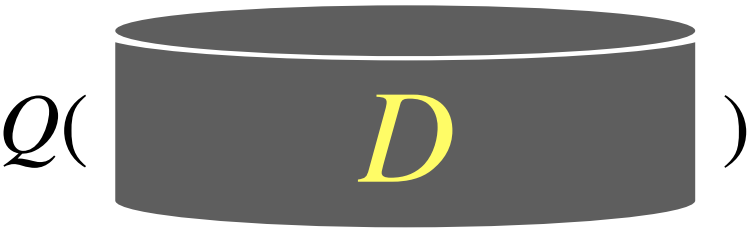
is the topic about



query answering

QED

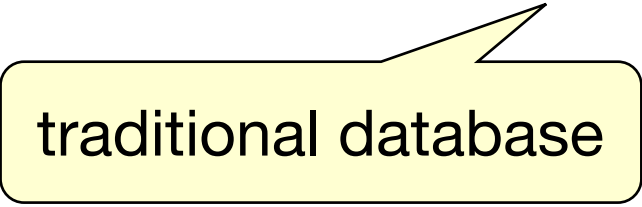




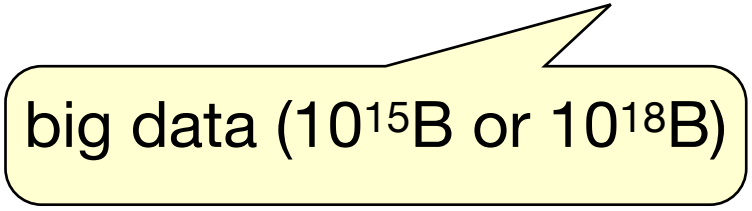
$Q($



)



traditional database



big data ( $10^{15}$ B or  $10^{18}$ B)





*Any fundamental challenges introduced by querying big data?*

# Challenges for Querying Big Data

Query answering is the topic about

*the computation of function  $Q(D)$*



*Any fundamental challenges introduced by querying big data?*

# A Graph Search query (Facebook)

*find all my friends who have online update records from UK*

- `friend(uid, fid)`
- `update(id, uid, country, date, post, ...)`

friend	
uid	fid
1 uid0	uid18
2 uid1	uid11
3 uid1	uid18
...	...

update					
id	uid	country	date	post	...
1 001	uid18	US	20160103	post#1	...
2 002	uid11	UK	20150103	post#2	...
3 003	uid11	UK	20170103	photo#3	...
...	...	...	...	...	...

```
SELECT fid
FROM   friend AS f, update AS u
WHERE  f.uid= uid1 AND f.fid=u.uid AND u.country=UK
```

my uid