Fetch documents from the web

```
$ curl -s --compressed https://www.gutenberg.org/cache/epub/2701/pg2701.txt |
> head
The Project Gutenberg EBook of Moby Dick; or The Whale, by Herman Melville

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almost no restrictions whatsoever.  You may copy it, give it away or
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Title: Moby Dick; or The Whale

$ curl -s --compressed https://www.gutenberg.org/cache/epub/2701/pg2701.txt |
> wc
  22108  215135 1257296
$
```

Fetch data from the web

```
$ curl -s "http://api.currencylayer.com/\
> live?access_key=$API_KEY&source=USD&currencies=EUR" | # Obtain USD EUR rate
> jq . # Format the JSON result
{
  "success": true,
  "terms": "https://currencylayer.com/terms",
  "privacy": "https://currencylayer.com/privacy",
  "timestamp": 1584462846,
  "source": "USD",
  "quotes": {
    "USDEUR": 0.91095
  }
}
$
```

无输出，解决方法：

Query JSON data

```
$ WGE='https://www.wikidata.org/w/api.php?action=wbgetentities&format=json' # API endpoint
$ curl -s "$WGE&titles=Moon&sites=enwiki" | # Obtain the Moon identifier
> jq -r '.entities[].id' # Query the JSON data for the identifier
Q405
$ MOONID=$(curl -s "$WGE&titles=Moon&sites=enwiki" | # Store the result in a variable
> jq -r '.entities[].id')
$ curl -s "$WGE&ids=$MOONID" | # Obtain Moon's data
> jq -r .entities.$MOONID.claims.P2067[].mainsnak.datavalue.value.amount # Query mass
+73.477
$
```

Query relational databases

```
$ echo 'SELECT COUNT(*) FROM projects' | # SQL query
> mysql -ughtorrent -p ghtorrent # MySQL client
Enter password:
count(*)
16331225
$
```

Commands for each database

```
$ sqlplus # Oracle
$ osql # Microsoft SQL Server
$ sqlite3  # SQLite engine
$ psql # PostgreSQL
$ odbc # Any ODBC source (http://spinellis.gr/sw/outwit)
```

```
$
```

Putting it all together

```
$ echo 'select url from projects limit 3' | # Obtain URL of first three projects
> mysql -ughtorrent -p ghtorrent | # Invoke MySQL client
> while read url ; do
>   curl -s $url | # Fetch project's details
>     # Print owner, project, and last push time
>     jq -r '{owner: .owner.login, name: .name, pushed: .pushed_at}'
> done
Enter password:
{
  "owner": "tosch",
  "name": "ruote-kit",
  "pushed": "2012-08-01T20:54:13Z"
}
{
  "owner": "kennethkalmer",
  "name": "ruote-kit",
  "pushed": "2013-07-22T03:54:28Z"
}
{
  "owner": "matplotlib",
  "name": "basemap",
  "pushed": "2015-12-14T18:23:44Z"
}
$
```

Query LDAP stores

```
$ curl ldap://ldap.satrapade.com:389/ou=People,dc=satrapade,dc=com\
> '?cn?sub?(&(objectClass=person)(uid=dds))'
DN: uid=dds,ou=People,dc=satrapade,dc=com
        cn: Diomidis Spinellis

$
```