

## دستور کار سری 3 آژ پایگاه داده

عرفان رفیعی اسکویی - 98243027

ابتدا به table مورد نظر میرویم :

```
mysql> use erfan;  
Database changed  
mysql> _
```

حال طبق دستورات جلو میرویم.

ابتدا همه ی موارد را از table انتخاب میکنیم :

```
mysql> select * from person;  
+-----+-----+-----+-----+-----+-----+  
| PERSON_ID | LAST_NAME | FIRST_NAME | BIRTH      | DEATH      | GENDER |  
+-----+-----+-----+-----+-----+-----+  
| 1 | ALAVI | ALI | 1990-11-12 | NULL | MALE |  
| 2 | MASUMI | FATEMEH | 1986-05-21 | NULL | FEMALE |  
| 3 | RAFIEI | REZA | 1967-01-08 | 2022-07-10 | MALE |  
| 4 | EHSANI | NAZANIN | 2001-08-16 | NULL | FEMALE |  
| 5 | SOLEIMANI | MOHAMMAD | 1995-03-01 | NULL | MALE |  
| 6 | SANAYI | SOLMAZ | 2005-09-09 | NULL | FEMALE |  
| 7 | HOSSEINI | NASER | 1974-12-26 | NULL | MALE |  
| 8 | JABBARI | HEDIYEH | 1981-07-18 | 2020-04-03 | FEMALE |  
| 9 | OLADI | AMIR | 2010-02-06 | NULL | MALE |  
| 10 | BASATI | ATOUSA | 1996-10-28 | NULL | FEMALE |  
+-----+-----+-----+-----+-----+-----+  
10 rows in set (0.00 sec)
```

حال با distinct انتخاب میکنیم :

```
mysql> SELECT FIRST_NAME FROM PERSON;  
+-----+  
| FIRST_NAME |  
+-----+  
| ALI |  
| FATEMEH |  
| REZA |  
| NAZANIN |  
| MOHAMMAD |  
| SOLMAZ |  
| NASER |  
| HEDIYEH |  
| AMIR |  
| ATOUSA |  
+-----+  
10 rows in set (0.00 sec)
```

```
mysql> SELECT DISTINCT FIRST_NAME FROM PERSON;
+-----+
| FIRST_NAME |
+-----+
| ALI        |
| FATEMEH    |
| REZA       |
| NAZANIN    |
| MOHAMMAD   |
| SOLMAZ     |
| NASER      |
| HEDIYEH    |
| AMIR       |
| ATOUSA     |
+-----+
10 rows in set (0.00 sec)
```

حال اسم و فامیل افرادی که فوت شده اند را می‌دهیم :

```
mysql> SELECT FIRST_NAME, LAST_NAME FROM PERSON WHERE DEATH IS NOT NULL;
+-----+-----+
| FIRST_NAME | LAST_NAME |
+-----+-----+
| REZA       | RAFIEI    |
| HEDIYEH    | JABBARI   |
+-----+-----+
2 rows in set (0.00 sec)
```

و در ادامه اسم و فامیل افرادی که فوت نشده اند :

```
mysql> SELECT FIRST_NAME, LAST_NAME FROM PERSON WHERE DEATH IS NULL;
+-----+-----+
| FIRST_NAME | LAST_NAME |
+-----+-----+
| ALI        | ALAVI     |
| FATEMEH    | MASUMI    |
| NAZANIN    | EHSANI    |
| MOHAMMAD   | SOLEIMANI |
| SOLMAZ     | SANAYI    |
| NASER      | HOSSEINI  |
| AMIR       | OLADI     |
| ATOUSA     | BASATI    |
+-----+-----+
8 rows in set (0.00 sec)
```

حال افرادی که سن شان بعد از سال 2000 است را لیست میکنیم :

```
mysql> SELECT FIRST_NAME, LAST_NAME FROM PERSON WHERE BIRTH > '2000-1-1';
```

FIRST_NAME	LAST_NAME
NAZANIN	EHSANI
SOLMAZ	SANAYI
AMIR	OLADI

```
3 rows in set (0.00 sec)
```

لیست افرادی که در ماه 8 بدنیا آمده اند :

```
mysql> SELECT FIRST_NAME, LAST_NAME FROM PERSON WHERE MONTH(BIRTH) = 8;
```

FIRST_NAME	LAST_NAME
NAZANIN	EHSANI

```
1 row in set (0.00 sec)
```

```
mysql>
```

لیست سن افراد زنده :

```
mysql> SELECT TIMESTAMPDIFF(YEAR,BIRTH,CURDATE()) AS AGE FROM PERSON WHERE DEATH IS NULL;
```

AGE
32
36
21
28
17
48
13
26

```
8 rows in set (0.00 sec)
```

سن تمامی ادم ها :

```
mysql> SELECT TIMESTAMPDIFF(YEAR,BIRTH,CURDATE()) AS AGE FROM PERSON;
+-----+
| AGE |
+-----+
| 32 |
| 36 |
| 56 |
| 21 |
| 28 |
| 17 |
| 48 |
| 41 |
| 13 |
| 26 |
+-----+
10 rows in set (0.00 sec)
```

کسانی که 3 ماه آینده تولدشان است :

```
mysql> SELECT FIRST_NAME, LAST_NAME FROM PERSON WHERE MONTH(BIRTH) = MONTH(Date_ADD(CURDATE(), INTERVAL 3 MONTH));
+-----+-----+
| FIRST_NAME | LAST_NAME |
+-----+-----+
| HEDIYEH   | JABBARI   |
+-----+-----+
1 row in set (0.00 sec)
```

کمترین و بیشترین و میانگین سن افراد زنده در جدول :

```
mysql> SELECT COUNT(PERSON_ID) AS ALIVES_COUNT, MAX(TIMESTAMPDIFF(YEAR, BIRTH, CURDATE())) AS MAX_AGE, MIN(TIMESTAMPDIFF(YEAR, BIRTH, CURDATE())) AS MIN_AGE,
AVG(TIMESTAMPDIFF(YEAR, BIRTH, CURDATE())) AS AVG_AGE FROM PERSON WHERE DEATH IS NULL;
+-----+-----+-----+-----+
| ALIVES_COUNT | MAX_AGE | MIN_AGE | AVG_AGE |
+-----+-----+-----+-----+
| 8 | 48 | 13 | 27.6250 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> _
```