Portfolio Exercise 4 Data Warehousing and using Oracle and MongoDB
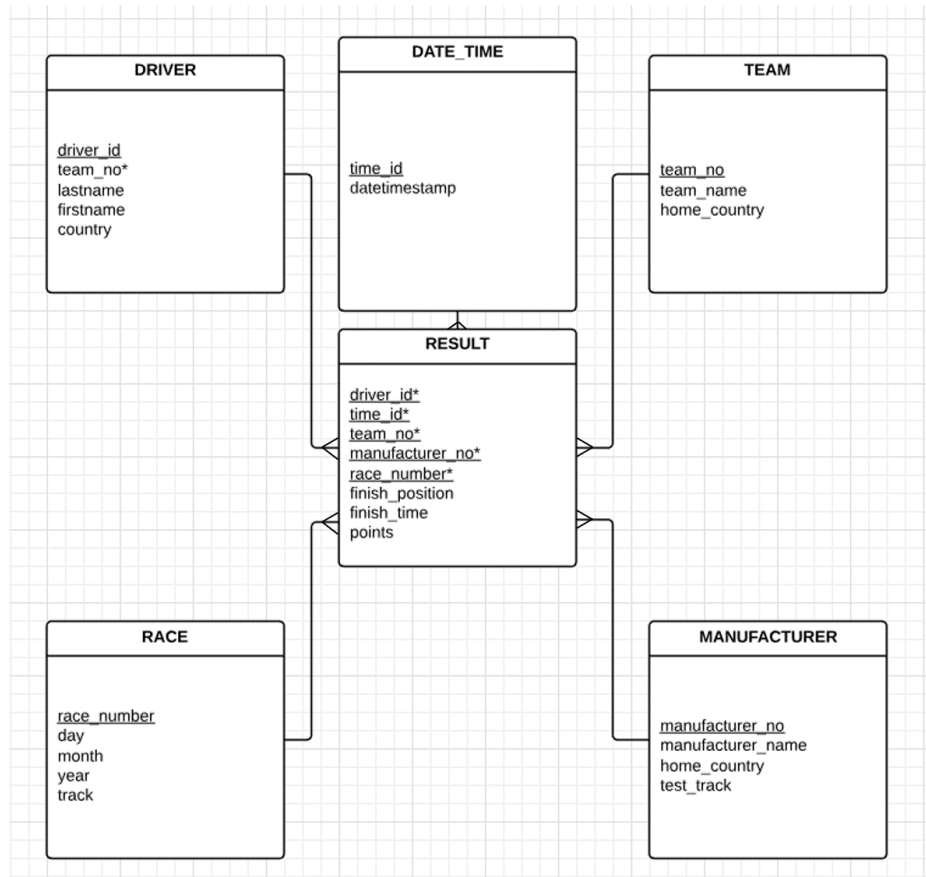
1.

2.

drop table RESULT;

drop table DATE_TIME;

drop table TEAM;

drop table MANUFACTURER;

drop table RACE;

drop table DRIVER;

create table DRIVER

(driver_id number(3) not null primary key,

lastname varchar2(30) not null,

firstname varchar2(30) not null,

country varchar2(30) not null);

```sql
create table RACE

(race_number number(3) not null primary key,

day timestamp not null,

month timestamp not null,

year timestamp not null,

track varchar2(30)not null);

create table MANUFACTURER

(manufacturer_no number(3) not null primary key,

manufacturer_name varchar2(30) not null,

home_country varchar2(30) not null,

test_track varchar2(30) not null);

 create table TEAM

(team_no number(3) not null primary key,

team_name varchar2(30) not null,

home_country varchar2(30) not null);

create table DATE_TIME

(time_id number(3) not null primary key,

datetimestamp timestamp not null);

 create table RESULT

(driver_id number(3) not null references DRIVER(driver_id),

time_id number(3) not null references DATE_TIME(time_id),

team_no number(3) not null references TEAM(team_no),

manufacturer_no number(3) not null references MANUFACTURER(manufacturer_no),

race_number number(3) not null references RACE(race_number),

finish_position number(2), finish_time timestamp, points number(4),

CONSTRAINT PK_RESULT PRIMARY KEY (driver_id, time_id, team_no, manufacturer_no,
race_number));
```

Table RESULT dropped.

Table DATE_TIME dropped.

Table TEAM dropped.

Table MANUFACTURER dropped.

Table RACE dropped.

Table DRIVER dropped.

Table DRIVER created.

Table RACE created.

Table MANUFACTURER created.

Table TEAM created.

Table DATE_TIME created.

Table RESULT created.

```sql
drop table RESULT;
drop table DATE_TIME;
drop table DRIVER;
drop table TEAM;
drop table MANUFACTURER;
drop table RACE;

create table RACE
(race_number number(3) not null primary key,
day timestamp not null,
month timestamp not null,
year timestamp not null,
track varchar2(30)not null);

create table MANUFACTURER
(manufacturer_no number(3) not null primary key,
manufacturer_name varchar2(30) not null,
home_country varchar2(30) not null,
test_track varchar2(30) not null);

create table TEAM
```

```sql
(team_no number(3) not null primary key,
team_name varchar2(50) not null,
home_country varchar2(30) not null);

create table DRIVER
(driver_id number(3) not null primary key,
team_no number(3) not null references TEAM (team_no),
lastname varchar2(30) not null,
firstname varchar2(30) not null,
country varchar2(30) not null);

create table DATE_TIME
(time_id number(3) not null primary key,
datetimestamp timestamp not null);

create table RESULT
(driver_id number(3) not null references DRIVER(driver_id),
time_id number(3) not null references DATE_TIME(time_id),
team_no number(3) not null references TEAM(team_no),
manufacturer_no number(3) not null references MANUFACTURER(manufactur
er_no),
race_number number(3) not null references RACE(race_number),
finish_position number(2),
finish_time timestamp,
points number(4),
CONSTRAINT PK_RESULT PRIMARY KEY (driver_id, time_id, team_no, manufa
cturer_no, race_number));


insert into RACE
values (1,TIMESTAMP  '2017-03-26 06:00:00', TIMESTAMP  '2017-03-26
06:00:00', TIMESTAMP '2017-03-26 06:00:00', 'Melbourne');
insert into RACE
values (2,TIMESTAMP '2017-04-09 07:00:00', TIMESTAMP '2017-04-09
07:00:00',TIMESTAMP '2017-04-09 07:00:00', 'Shanghai');
insert into RACE
values (3,TIMESTAMP '2017-04-16 16:00:00', TIMESTAMP '2017-04-16
16:00:00',TIMESTAMP '2017-04-16 16:00:00', 'Bahrain');
insert into RACE
values (4,TIMESTAMP '2017-04-30 13:00:00', TIMESTAMP '2017-04-30
13:00:00',TIMESTAMP '2017-04-30 13:00:00', 'Sochi');
insert into RACE
values (5,TIMESTAMP '2017-05-14 13:00:00', TIMESTAMP '2017-05-14
13:00:00',TIMESTAMP '2017-05-14 13:00:00', 'Barcelona');
insert into RACE
values (6,TIMESTAMP '2017-05-28 13:00:00', TIMESTAMP '2017-05-28
13:00:00',TIMESTAMP '2017-05-28 13:00:00', 'Monte Carlo');
insert into RACE
values (7,TIMESTAMP '2017-06-11 19:00:00', TIMESTAMP '2017-06-11
19:00:00',TIMESTAMP '2017-06-11 19:00:00', 'Montreal');
insert into RACE
values (8,TIMESTAMP '2017-06-25 14:00:00', TIMESTAMP '2017-06-25
14:00:00',TIMESTAMP '2017-06-25 14:00:00', 'Baku');
insert into RACE
values (9,TIMESTAMP '2017-07-09 13:00:00', TIMESTAMP '2017-07-09
13:00:00',TIMESTAMP '2017-07-09 13:00:00', 'Spielberg');
insert into RACE
values (10,TIMESTAMP '2017-07-16 13:00:00', TIMESTAMP '2017-07-16
13:00:00',TIMESTAMP '2017-07-16 13:00:00', 'Silverstone');
insert into RACE
values (11,TIMESTAMP '2017-07-30 13:00:00', TIMESTAMP '2017-07-30
```

```sql
13:00:00',TIMESTAMP '2017-07-30 13:00:00', 'Budapest');
insert into RACE
values (12,TIMESTAMP '2017-08-27 13:00:00', TIMESTAMP '2017-08-27
13:00:00',TIMESTAMP '2017-08-27 13:00:00', 'Spa-Francorchamps');
insert into RACE
values (13,TIMESTAMP '2017-09-03 13:00:00', TIMESTAMP '2017-09-03
13:00:00',TIMESTAMP '2017-09-03 13:00:00', 'Monza');
insert into RACE
values (14,TIMESTAMP '2017-09-17 13:00:00', TIMESTAMP '2017-09-17
13:00:00',TIMESTAMP '2017-09-17 13:00:00', 'Singapore');


insert into MANUFACTURER
values (1,'Ferrari', 'Italy', 'Fiorano Circuit');
insert into MANUFACTURER
values (2,'Force India-Mercedes', 'India', 'Buddh International
Circuit');
insert into MANUFACTURER
values (3,'Haas-Ferrari', 'United States of America', 'Circuit of the
Americas');
insert into MANUFACTURER
values (4,'McLaren-Honda', 'United Kingdom', 'Silverstone');
insert into MANUFACTURER
values (5,'Mercedes', 'Germany', 'Nürburgring');
insert into MANUFACTURER
values (6,'Red Bull Racing-TAG Heuer', 'Austria', 'Spielberg');
insert into MANUFACTURER
values (7,'Renault', 'France', 'Circuit Paul Ricard');
insert into MANUFACTURER
values (8,'Sauber-Ferrari', 'Switzerland', 'Bremgarten Circuit');
insert into MANUFACTURER
values (9,'Toro Rosso', 'Italy', 'Autodromo Nazionale Monza');
insert into MANUFACTURER
values (10,'Williams-Mercedes', 'United Kingdom', 'Silverstone');

insert into TEAM
values (1,' Scuderia Ferrari', 'Italy');
insert into TEAM
values (2,'Sahara Force India F1 Team', 'India');
insert into TEAM
values (3,'Haas F1 Team', 'United States of America');
insert into TEAM
values (4,'McLaren Honda Formula 1 Team', 'United Kingdom');
insert into TEAM
values (5,'Mercedes AMG Petronas Motorsport', 'Germany');
insert into TEAM
values (6,'Red Bull Racing', 'Austria');
insert into TEAM
values (7,'Renault Sport Formula One Team', 'France');
insert into TEAM
values (8,'Sauber F1 Team', 'Switzerland');
insert into TEAM
values (9,'Scuderia Toro Rosso', 'Italy');
insert into TEAM
values (10,'Williams Martini Racing', 'United Kingdom');

insert into DRIVER
values (44, 5,'Hamilton', 'Lewis', 'United Kingdom');
insert into DRIVER
values (5,1,'Vettel', 'Sebastian', 'Germany');
insert into DRIVER
```

```sql
          values (77,5,'Bottas', 'Valtteri', 'Finland');
insert into DRIVER
          values (7,1,'Räikkönen', 'Kimi', 'Finland');
insert into DRIVER
          values (3,6,'Ricciardo', 'Daniel', 'Australia');
insert into DRIVER
          values (33,6,'Verstappen', 'Max', 'Netherlands');
insert into DRIVER
          values (11,2,'Pérez', 'Sergio', 'Mexico');
insert into DRIVER
          values (31,2,'Ocon', 'Esteban', 'France');
insert into DRIVER
          values (55,7,'Sainz Jr.', 'Carlos', 'Spain');
insert into DRIVER
          values (27,7,'Hülkenberg', 'Nico', 'Germany');
insert into DRIVER
          values (19,10,'Massa', 'Felipe', 'Brazil');
insert into DRIVER
          values (18,10,'Stroll', 'Lance', 'Canada');
insert into DRIVER
          values (8,3,'Grosjean', 'Romain', 'France');
insert into DRIVER
          values (20,3,'Magnussen', 'Kevin', 'Denmark');
insert into DRIVER
          values (14,4,'Alonso', 'Fernando', 'Spain');
insert into DRIVER
          values (2,4,'Vandoorne', 'Lewis', 'Belgium');
insert into DRIVER
          values (30,7,'Palmer', 'Jolyon', 'United Kingdom');
insert into DRIVER
          values (94,8,'Wehrlein', 'Pascal', 'Germany');
insert into DRIVER
          values (26,9,'Kvyat', 'Daniil', 'Russian Federation');
insert into DRIVER
          values (9,8,'Ericsson', 'Marcus', 'Sweeden');
insert into DRIVER
          values (10,9,'Gasly', 'Pierre', 'France');
insert into DRIVER
          values (36,8,'Giovinazzi', 'Antonio', 'Italy');
insert into DRIVER
          values (28,9,'Hartley', 'Brendon', 'Australia');

insert into DATE_TIME
          values (1,TIMESTAMP '2017-03-26 06:00:00');
insert into DATE_TIME
          values (2,TIMESTAMP '2017-04-09 07:00:00');
insert into DATE_TIME
          values (3,TIMESTAMP '2017-04-16 16:00:00');
insert into DATE_TIME
          values (4,TIMESTAMP '2017-04-30 13:00:00');
insert into DATE_TIME
          values (5,TIMESTAMP '2017-05-14 13:00:00');
insert into DATE_TIME
          values (6,TIMESTAMP '2017-05-28 13:00:00');
insert into DATE_TIME
          values (7,TIMESTAMP '2017-06-11 19:00:00');
insert into DATE_TIME
          values (8,TIMESTAMP '2017-06-25 14:00:00');
insert into DATE_TIME
          values (9,TIMESTAMP '2017-07-09 13:00:00');
insert into DATE_TIME
```

```sql
values (10,TIMESTAMP '2017-07-16 13:00:00');
insert into DATE_TIME
values (11,TIMESTAMP '2017-07-30 13:00:00');
insert into DATE_TIME
values (12,TIMESTAMP '2017-08-27 13:00:00');
insert into DATE_TIME
values (13,TIMESTAMP '2017-09-03 13:00:00');
insert into DATE_TIME
values (14,TIMESTAMP '2017-09-17 13:00:00');


insert into RESULT
values (    5,    1,    1,    1,    1,    1,    TIMESTAMP '2017-03-26
07:24:11',    25    );
insert into RESULT
values (   77,    1,    5,    5,    1,    3,    TIMESTAMP '2017-03-
26 07:24:22',    15    );
insert into RESULT
values (    7,    1,    1,    1,    1,    4,    TIMESTAMP '2017-03-26
07:24:34',    12    );
insert into RESULT
values (    3,    1,    6,    6,    1,    17,    TIMESTAMP '2017-03-
26 07:25:11',    0    );
insert into RESULT
values (   33,    1,    6,    6,    1,    5,    TIMESTAMP '2017-03-
26 07:24:54',    10    );
insert into RESULT
values (   11,    1,    2,    2,    1,    7,    TIMESTAMP '2017-03-
26 07:26:11',    6    );
insert into RESULT
values (   31,    1,    2,    2,    1,    10,    TIMESTAMP '2017-03-
26 07:27:11',    1    );
insert into RESULT
values (   55,    1,    7,    7,    1,    8,    TIMESTAMP '2017-03-
26 07:28:11',    4    );
insert into RESULT
values (   27,    1,    7,    7,    1,    11,    TIMESTAMP '2017-03-
26 07:29:11',    0    );
insert into RESULT
values (   19,    1,    10,    10,    1,    6,    TIMESTAMP '2017-
03-26 07:30:11',    8    );
insert into RESULT
values (   18,    1,    10,    10,    1,    16,    TIMESTAMP '2017-
03-26 07:31:11',    0    );
insert into RESULT
values (    8,    1,    3,    3,    1,    20,    TIMESTAMP '2017-03-
26 07:32:11',    0    );
insert into RESULT
values (   20,    1,    3,    3,    1,    15,    TIMESTAMP '2017-03-
26 07:33:11',    0    );
insert into RESULT
values (   14,    1,    4,    4,    1,    14,    TIMESTAMP '2017-03-
26 07:34:11',    0    );
insert into RESULT
values (    2,    1,    4,    4,    1,    13,    TIMESTAMP '2017-03-
26 07:35:11',    0    );
insert into RESULT
values (   30,    1,    7,    7,    1,    19,    TIMESTAMP '2017-03-
26 07:37:11',    0    );
insert into RESULT
values (   94,    1,    8,    8,    1,    21,    TIMESTAMP '2017-03-
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```
26 07:38:11',      0     );
insert into RESULT
values (      26,     1,      9,      9,      1,      9,     TIMESTAMP '2017-03-
26 07:39:11',      2     );
insert into RESULT
values (      9,     1,      8,      8,      1,      18,     TIMESTAMP '2017-03-
26 07:40:11',      0     );
insert into RESULT
values (      10,     1,      9,      9,      1,      22,     TIMESTAMP '2017-03-
26 07:41:11',      0     );
insert into RESULT
values (      36,     1,      8,      8,      1,      12,     TIMESTAMP '2017-03-
26 07:42:11',      0     );
insert into RESULT
values (      28,     1,      9,      9,      1,      23,     TIMESTAMP '2017-03-
26 07:43:11',      0     );
insert into RESULT
values (      44,     2,      5,      5,      2,      1,     TIMESTAMP '2017-04-
09 08:37:36',      25     );
insert into RESULT
values (      5,     2,      1,      1,      2,      2,     TIMESTAMP '2017-04-09
08:37:38',      18     );
insert into RESULT
values (      77,     2,      5,      5,      2,      3,     TIMESTAMP '2017-04-
09 08:37:39',      15     );
insert into RESULT
values (      7,     2,      1,      1,      2,      4,     TIMESTAMP '2017-04-09
08:37:40',      12     );
insert into RESULT
values (      3,     2,      6,      6,      2,      5,     TIMESTAMP '2017-04-09
08:37:41',      10     );
insert into RESULT
values (      33,     2,      6,      6,      2,      6,     TIMESTAMP '2017-04-
09 08:37:42',      8     );
insert into RESULT
values (      11,     2,      2,      2,      2,      7,     TIMESTAMP '2017-04-
09 08:37:43',      6     );
insert into RESULT
values (      31,     2,      2,      2,      2,      8,     TIMESTAMP '2017-04-
09 08:37:44',      4     );
insert into RESULT
values (      55,     2,      7,      7,      2,      9,     TIMESTAMP '2017-04-
09 08:37:45',      2     );
insert into RESULT
values (      27,     2,      7,      7,      2,      10,     TIMESTAMP '2017-04-
09 08:37:46',      1     );
insert into RESULT
values (      19,     2,      10,      10,      2,      11,     TIMESTAMP '2017-
04-09 08:38:36',      0     );
insert into RESULT
values (      18,     2,      10,      10,      2,      12,     TIMESTAMP '2017-
04-09 08:39:36',      0     );
insert into RESULT
values (      8,     2,      3,      3,      2,      13,     TIMESTAMP '2017-04-
09 08:40:36',      0     );
insert into RESULT
values (      20,     2,      3,      3,      2,      14,     TIMESTAMP '2017-04-
09 08:41:36',      0     );
insert into RESULT
values (      14,     2,      4,      4,      2,      15,     TIMESTAMP '2017-04-
09 08:42:36',      0     );
```

```sql
insert into RESULT
values (    2,     2,     4,     4,     2,     16,      TIMESTAMP '2017-04-
09 08:43:36',     0     );
insert into RESULT
values (    30,    2,     7,     7,     2,     17,      TIMESTAMP '2017-04-
09 08:44:36',     0     );
insert into RESULT
values (    94,    2,     8,     8,     2,     18,      TIMESTAMP '2017-04-
09 08:45:36',     0     );
insert into RESULT
values (    26,    2,     9,     9,     2,     19,      TIMESTAMP '2017-04-
09 08:46:36',     0     );
insert into RESULT
values (    9,     2,     8,8,     2,     20,      TIMESTAMP '2017-04-09
08:47:36',     0     );
insert into RESULT
values (    10,    2,     9,     9,     2,     21,      TIMESTAMP '2017-04-
09 08:48:36',     0     );
insert into RESULT
values (    36,    2,     8,     8,     2,     22,      TIMESTAMP '2017-04-
09 08:49:36',     0     );
insert into RESULT
values (    28,    2,     9,     9,     2,     23,      TIMESTAMP '2017-04-
09 08:50:36',     0     );
insert into RESULT
values (    44    ,3    ,5,     5,     3,     10,      TIMESTAMP '2017-04-
16 17:34:14',     1     );
insert into RESULT
values (    5,     3    ,1    ,1,     3    ,9,      TIMESTAMP '2017-04-16
17:34:12',     2     );
insert into RESULT
values (    77    ,3,     5,     5,     3,     8,      TIMESTAMP '2017-04-
16 17:34:10',     4     );
insert into RESULT
values (    7    ,3,     1,     1,     3,     7,      TIMESTAMP '2017-04-16
17:34:09',     6     );
insert into RESULT
values (    3    ,3,     6,     6,     3,     6,      TIMESTAMP '2017-04-16
17:34:08',     8     );
insert into RESULT
values (    33,    3    ,6,     6    ,3,     5,      TIMESTAMP '2017-04-
16 17:34:07',     10     );
insert into RESULT
values (    11,    3    ,2    ,2    ,3    ,4,      TIMESTAMP '2017-04-
16 17:34:05',     12     );
insert into RESULT
values (    31,    3    ,2    ,2,     3    ,3,      TIMESTAMP '2017-04-
16 17:34:03',     15     );
insert into RESULT
values (    55,    3    ,7    ,7,     3,     2,      TIMESTAMP '2017-04-
16 17:34:01',     18     );
insert into RESULT
values (    27,3    ,7,7,     3    ,1,      TIMESTAMP '2017-04-16
17:34:53',     25     );
insert into RESULT
values (    19    ,3,     10,    10,    3,     11    ,TIMESTAMP '2017-
04-16 17:36:53',     0     );
insert into RESULT
values (    18,    3,     10,    10,    3,     12    ,TIMESTAMP '2017-
04-16 17:37:53',     0     );
insert into RESULT
```

```
values (      8       ,3,       3,       3,        3,        13       ,TIMESTAMP '2017-04-
16 17:38:53',       0      );
insert into RESULT
values (      20     ,3      ,3,       3,        3,        14      ,TIMESTAMP '2017-04-
16 17:39:53',       0      );
insert into RESULT
values (      14,      3,       4      ,4       ,3,        15      ,TIMESTAMP '2017-04-
16 17:40:53',       0      );
insert into RESULT
values (      2,       3,       4,        4,        3,        16       ,TIMESTAMP '2017-04-
16 17:41:53',       0      );
insert into RESULT
values (      30     ,3,        7,        7,        3,        17       ,TIMESTAMP '2017-04-
16 17:42:53',       0      );
insert into RESULT
values (      94     ,3,        8,        8       ,3,        18       ,TIMESTAMP '2017-04-
16 17:43:53',       0      );
insert into RESULT
values (      26     ,3,        9       ,9       ,3      ,19       ,TIMESTAMP '2017-04-
16 17:44:53',       0      );
insert into RESULT
values (      9,       3,       8,        8,        3       ,20       ,TIMESTAMP '2017-04-
16 17:45:53',       0      );
insert into RESULT
values (      10,      3       ,9       ,9       ,3      ,21       ,TIMESTAMP '2017-04-
16 17:46:53',       0      );
insert into RESULT
values (      36     ,3       ,8       ,8       ,3      ,22       ,TIMESTAMP '2017-04-
16 17:47:53',       0      );
insert into RESULT
values (      28     ,3       ,9       ,9       ,3      ,23       ,TIMESTAMP '2017-04-
16 17:48:53',       0      );


insert into RESULT
values (      44     ,4       ,5,        5,4       ,1       ,TIMESTAMP '2017-04-30
14:28:08',       25      );
insert into RESULT
values (      5,       4,        1,        1       ,4,        3       ,TIMESTAMP '2017-04-30
14:28:10',       15      );
insert into RESULT
values (      77,      4       ,5,        5,        4,        5       ,TIMESTAMP '2017-04-
30 14:28:12',       10      );
insert into RESULT
values (      7       ,4       ,1       ,1,        4       ,7       ,TIMESTAMP '2017-04-30
14:28:14',       6      );
insert into RESULT
values (      3       ,4,        6,        6       ,4,        9       ,TIMESTAMP '2017-04-30
14:28:16',       2      );
insert into RESULT
values (      33,      4       ,6,        6,        4,        2       ,TIMESTAMP '2017-04-
30 14:28:09',       18      );
insert into RESULT
values (      11     ,4,        2,        2,        4,        4       ,TIMESTAMP '2017-04-
30 14:28:11',       12      );
insert into RESULT
values (      31,4,       2       ,2,        4,        6       ,TIMESTAMP '2017-04-30
14:28:13',       8      );
insert into RESULT
values (      55,      4,        7,        7,        4,        8       ,TIMESTAMP '2017-04-
30 14:28:15',       4      );
insert into RESULT
```

```sql
values (    27     ,4     ,7     ,7,     4,     10     ,TIMESTAMP '2017-04-30 14:28:17',    1    );
insert into RESULT
values (    19,    4,    10,    10,    4,    11    ,TIMESTAMP '2017-04-30 14:29:08',    0    );
insert into RESULT
values (    18,    4    ,10,    10,    4    ,12    ,TIMESTAMP '2017-04-30 14:30:08',    0    );
insert into RESULT
values (    8     ,4    ,3     ,3     ,4    ,13    ,TIMESTAMP '2017-04-30 14:31:08',    0    );
insert into RESULT
values (    20    ,4    ,3     ,3,    4    ,14    ,TIMESTAMP '2017-04-30 14:32:08',    0    );
insert into RESULT
values (    14,    4    ,4     ,4,    4,    15    ,TIMESTAMP '2017-04-30 14:33:08',    0    );
insert into RESULT
values (    2     ,4    ,4     ,4    ,4,    16    ,TIMESTAMP '2017-04-30 14:34:08',    0    );
insert into RESULT
values (    30    ,4    ,7,    7    ,4    ,17    ,TIMESTAMP '2017-04-30 14:35:08',    0    );
insert into RESULT
values (    94    ,4    ,8     ,8     ,4    ,18    ,TIMESTAMP '2017-04-30 14:36:08',    0    );
insert into RESULT
values (    26    ,4,9     ,9,    4    ,19    ,TIMESTAMP '2017-04-30 14:37:08',    0    );
insert into RESULT
values (    9     ,4    ,8     ,8    ,4,20    ,TIMESTAMP '2017-04-30 14:38:08',    0    );
insert into RESULT
values (    10    ,4,    9,9,    4,    21    ,TIMESTAMP '2017-04-30 14:39:08',    0    );
insert into RESULT
values (    36    ,4,    8     ,8,    4,    22    ,TIMESTAMP '2017-04-30 14:40:08',    0    );
insert into RESULT
values (    28,    4,    9     ,9,    4,    23    ,TIMESTAMP '2017-04-30 14:41:08',    0    );

insert into RESULT
values (    44,    5,    5,    5,    5,    2    ,TIMESTAMP '2017-05-14 14:35:57',    18    );
insert into RESULT
values (    5,    5,    1    ,1,    5,    4    ,TIMESTAMP '2017-05-14 14:35:59',    12    );
insert into RESULT
values (    77,    5,    5,    5,    5,    6    ,TIMESTAMP '2017-05-14 14:36:10',    8    );
insert into RESULT
values (    7    ,5,    1    ,1    ,5,    8    ,TIMESTAMP '2017-05-14 14:36:30',    4    );
insert into RESULT
values (    3,    5,    6,    6    ,5,    10    ,TIMESTAMP '2017-05-14 14:36:50',    1    );
insert into RESULT
values (    33,    5,    6,    6    ,5,    1    ,TIMESTAMP '2017-05-14 14:35:56',    25    );
insert into RESULT
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```sql
values (    11,    5,    2,    2,    5,    3    ,TIMESTAMP '2017-05-
14 14:35:58',    15    );
insert into RESULT
values (    31    ,5,    2    ,2,    5,    5    ,TIMESTAMP '2017-05-
14 14:36:00',    10    );
insert into RESULT
values (    55,    5,    7    ,7    ,5,    7    ,TIMESTAMP '2017-05-
14 14:36:20',    6    );
insert into RESULT
values (    27,    5,    7    ,7    ,5,    9    ,TIMESTAMP '2017-05-
14 14:36:40',    2    );
insert into RESULT
values (    19,    5,    10    ,10,    5,    11    ,TIMESTAMP '2017-
05-14 14:36:56',    0    );
insert into RESULT
values (    18    ,5,    10,    10    ,5,    12    ,TIMESTAMP '2017-
05-14 14:37:56',    0    );
insert into RESULT
values (    8    ,5,    3,    3    ,5,    13    ,TIMESTAMP '2017-05-
14 14:38:56',    0    );
insert into RESULT
values (    20    ,5,    3,    3    ,5,    14    ,TIMESTAMP '2017-05-
14 14:39:56',    0    );
insert into RESULT
values (    14,    5,    4,    4    ,5,    15    ,TIMESTAMP '2017-05-
14 14:40:56',    0    );
insert into RESULT
values (    2    ,5,    4,    4    ,5,    16    ,TIMESTAMP '2017-05-
14 14:41:56',    0    );
insert into RESULT
values (    30,    5,    7    ,7    ,5,    17    ,TIMESTAMP '2017-05-
14 14:42:56',    0    );
insert into RESULT
values (    94,    5,    8,    8,    5,    18    ,TIMESTAMP '2017-05-
14 14:43:56',    0    );
insert into RESULT
values (    26,    5,    9,    9    ,5,    19    ,TIMESTAMP '2017-05-
14 14:44:56',    0    );
insert into RESULT
values (    9    ,5,    8,    8    ,5,    20    ,TIMESTAMP '2017-05-
14 14:45:56',    0    );
insert into RESULT
values (    10    ,5,    9    ,9,    5,    21    ,TIMESTAMP '2017-05-
14 14:46:56',    0    );
insert into RESULT
values (    36    ,5,    8    ,8,    5,    22    ,TIMESTAMP '2017-05-
14 14:47:56',    0    );
insert into RESULT
values (    28    ,5,    9    ,9    ,5,    23    ,TIMESTAMP '2017-05-
14 14:48:56',    0    );
insert into RESULT
values (    44    ,6    ,5,    5,    6,    2    ,TIMESTAMP '2017-05-
28 14:24:15',    18    );
insert into RESULT
values (    5,    6    ,1,    1,    6    ,1    ,TIMESTAMP '2017-05-28
14:24:11',    25    );
insert into RESULT
values (    77    ,6    ,5,    5,    6,    3    ,TIMESTAMP '2017-05-
28 14:24:22',    15    );
insert into RESULT
values (    7    ,6    ,1,    1    ,6,    4    ,TIMESTAMP '2017-05-28
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14:24:34',    12    );
insert into RESULT
values (    3    ,6    ,6,    6    ,6,    17    ,TIMESTAMP '2017-05-
28 14:25:11',    0    );
insert into RESULT
values (    33    ,6,    6,    6,    6,5    ,TIMESTAMP '2017-05-28
14:24:54',    10    );
insert into RESULT
values (    11    ,6    ,2,    2,    6,    7    ,TIMESTAMP '2017-05-
28 14:28:11',    6    );
insert into RESULT
values (    31,    6,    2,    2    ,6    ,10    ,TIMESTAMP '2017-05-
28 14:27:11',    1    );
insert into RESULT
values (    55,    6    ,7,    7,    6,    8    ,TIMESTAMP '2017-05-
28 14:28:11',    4    );
insert into RESULT
values (    27    ,6    ,7    ,7    ,6    ,11    ,TIMESTAMP '2017-05-
28 14:29:11',    0    );
insert into RESULT
values (    19,    6,    10    ,10,    6    ,6    ,TIMESTAMP '2017-
05-28 14:30:11',    8    );
insert into RESULT
values (    18    ,6    ,10,    10    ,6    ,16    ,TIMESTAMP '2017-
05-28 14:31:11',    0    );
insert into RESULT
values (    8    ,6,    3,    3    ,6,    20    ,TIMESTAMP '2017-05-
28 14:32:11',    0    );
insert into RESULT
values (    20    ,6    ,3    ,3,    6,    15    ,TIMESTAMP '2017-05-
28 14:33:11',    0    );
insert into RESULT
values (    14    ,6    ,4,    4,    6,    14    ,TIMESTAMP '2017-05-
28 14:34:11',    0    );
insert into RESULT
values (    2    ,6    ,4,    4,    6,    13    ,TIMESTAMP '2017-05-
28 14:35:11',    0    );
insert into RESULT
values (    30    ,6    ,7,    7    ,6,    19    ,TIMESTAMP '2017-05-
28 14:37:11',    0    );
insert into RESULT
values (    94    ,6    ,8    ,8,6,    21    ,TIMESTAMP '2017-05-28
14:38:11',    0    );
insert into RESULT
values (    26,    6    ,9,    9    ,6    ,9    ,TIMESTAMP '2017-05-
28 14:39:11',    2    );
insert into RESULT
values (    9    ,6,    8    ,8,    6    ,18    ,TIMESTAMP '2017-05-
28 14:40:11',    0    );
insert into RESULT
values (    10,6    ,9    ,9,    6,    22    ,TIMESTAMP '2017-05-28
14:41:11',    0    );
insert into RESULT
values (    36,    6,    8,    8,    6,    12    ,TIMESTAMP '2017-05-
28 14:42:11',    0    );
insert into RESULT
values (    28,    6,    9,    9,    6    ,23    ,TIMESTAMP '2017-05-
28 14:43:11',    0    );

insert into RESULT
values (    44,    7    ,5,    5,    7,    1    ,TIMESTAMP '2017-06-
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```sql
11 20:37:36',    25    );
insert into RESULT
values (    5,    7,    1,    1,    7    ,2    ,TIMESTAMP '2017-06-11
20:37:38',    18    );
insert into RESULT
values (    77,    7    ,5,    5,    7,    3    ,TIMESTAMP '2017-06-
11 20:37:39',    15    );
insert into RESULT
values (    7    ,7,    1,    1,    7,    4    ,TIMESTAMP '2017-06-11
20:37:40',    12    );
insert into RESULT
values (    3,    7    ,6,    6,    7,    5    ,TIMESTAMP '2017-06-11
20:37:41',    10    );
insert into RESULT
values (    33    ,7,    6    ,6    ,7,6    ,TIMESTAMP '2017-06-11
20:37:42',    8    );
insert into RESULT
values (    11,    7,    2,    2,    7,    7    ,TIMESTAMP '2017-06-
11 20:37:43',    6    );
insert into RESULT
values (    31,    7    ,2,    2,    7,    8    ,TIMESTAMP '2017-06-
11 20:37:44',    4    );
insert into RESULT
values (    55,    7,    7,    7,    7,    9    ,TIMESTAMP '2017-06-
11 20:37:45',    2    );
insert into RESULT
values (    27,    7,    7,    7,    7,    10    ,TIMESTAMP '2017-06-
11 20:37:46',    1    );
insert into RESULT
values (    19    ,7    ,10,    10,    7    ,11    ,TIMESTAMP '2017-
06-11 20:38:36',    0    );
insert into RESULT
values (    18,    7    ,10    ,10    ,7,    12    ,TIMESTAMP '2017-
06-11 20:39:36',    0    );
insert into RESULT
values (    8    ,7,    3    ,3,    7    ,13    ,TIMESTAMP '2017-06-
11 20:40:36',    0    );
insert into RESULT
values (    20,    7    ,3    ,3,    7    ,14    ,TIMESTAMP '2017-06-
11 20:41:36',    0    );
insert into RESULT
values (    14    ,7,    4    ,4    ,7    ,15    ,TIMESTAMP '2017-06-
11 20:42:36',    0    );
insert into RESULT
values (    2    ,7    ,4    ,4,    7    ,16    ,TIMESTAMP '2017-06-
11 20:43:36',    0    );
insert into RESULT
values (    30,    7    ,7    ,7    ,7,17    ,TIMESTAMP '2017-06-11
20:44:36',    0    );
insert into RESULT
values (    94    ,7,    8    ,8,    7,    18    ,TIMESTAMP '2017-06-
11 20:45:36',    0    );
insert into RESULT
values (    26    ,7,    9    ,9    ,7,    19    ,TIMESTAMP '2017-06-
11 20:46:36',    0    );
insert into RESULT
values (    9,    7    ,8,    8,    7,    20    ,TIMESTAMP '2017-06-
11 20:47:36',    0    );
insert into RESULT
values (    10,    7    ,9    ,9,    7    ,21    ,TIMESTAMP '2017-06-
11 20:48:36',    0    );
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insert into RESULT
values (    36    ,7    ,8,    8,    7,    22    ,TIMESTAMP '2017-06-
11 20:49:36',    0    );
insert into RESULT
values (    28,    7,    9,    9,    7,    23    ,TIMESTAMP '2017-06-
11 20:50:36',    0    );

insert into RESULT
values (    44,    8    ,5,    5,    8,    10    ,TIMESTAMP '2017-06-
25 15:34:14',    1    );
insert into RESULT
values (    5,    8    ,1,    1,    8,    9    ,TIMESTAMP '2017-06-25
15:34:12',    2    );
insert into RESULT
values (    77,    8    ,5,    5,    8,    8    ,TIMESTAMP '2017-06-
25 15:34:10',    4    );
insert into RESULT
values (    7    ,8,    1,    1,8,    7    ,TIMESTAMP '2017-06-25
15:34:09',    6    );
insert into RESULT
values (    3,    8    ,6,    6,    8,    6    ,TIMESTAMP '2017-06-25
15:34:08',    8    );
insert into RESULT
values (    33,    8,    6,    6    ,8,    5    ,TIMESTAMP '2017-06-
25 15:34:07',    10    );
insert into RESULT
values (    11    ,8    ,2,    2    ,8,    4    ,TIMESTAMP '2017-06-
25 15:34:05',    12    );
insert into RESULT
values (    31,    8    ,2    ,2    ,8,    3    ,TIMESTAMP '2017-06-
25 15:34:03',    15    );
insert into RESULT
values (    55    ,8    ,7,    7,    8,    2    ,TIMESTAMP '2017-06-
25 15:34:01',    18    );
insert into RESULT
values (    27,    8    ,7,    7    ,8,1    ,TIMESTAMP '2017-06-25
15:34:53',    25    );
insert into RESULT
values (    19    ,8    ,10    ,10,    8,    11    ,TIMESTAMP '2017-
06-25 15:36:53',    0    );
insert into RESULT
values (    18    ,8    ,10,    10,    8,    12    ,TIMESTAMP '2017-
06-25 15:37:53',    0    );
insert into RESULT
values (    8,    8    ,3    ,3    ,8    ,13    ,TIMESTAMP '2017-06-
25 15:38:53',    0    );
insert into RESULT
values (    20    ,8    ,3,    3    ,8    ,14    ,TIMESTAMP '2017-06-
25 15:39:53',    0    );
insert into RESULT
values (    14    ,8    ,4    ,4    ,8,    15    ,TIMESTAMP '2017-06-
25 15:40:53',    0    );
insert into RESULT
values (    2    ,8    ,4    ,4,    8    ,16    ,TIMESTAMP '2017-06-
25 15:41:53',    0    );
insert into RESULT
values (    30    ,8    ,7    ,7,    8,    17    ,TIMESTAMP '2017-06-
25 15:42:53',    0    );
insert into RESULT
values (    94    ,8,    8,    8,    8,    18    ,TIMESTAMP '2017-06-
25 15:43:53',    0    );
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insert into RESULT
values (    26,     8    ,9,     9,     8,     19     ,TIMESTAMP '2017-06-
25 15:44:53',     0    );
insert into RESULT
values (    9    ,8    ,8    ,8,     8,     20     ,TIMESTAMP '2017-06-
25 15:45:53',     0    );
insert into RESULT
values (    10,8    ,9    ,9,     8,     21     ,TIMESTAMP '2017-06-25
15:46:53',     0    );
insert into RESULT
values (    36    ,8    ,8,     8,     8,     22     ,TIMESTAMP '2017-06-
25 15:47:53',     0    );
insert into RESULT
values (    28    ,8    ,9    ,9    ,8    ,23     ,TIMESTAMP '2017-06-
25 15:48:53',     0    );


insert into RESULT
values (    44,     9,     5    ,5,     9,     1    ,TIMESTAMP '2017-07-
09 14:28:08',     25     );
insert into RESULT
values (    5    ,9    ,1    ,1    ,9,     3    ,TIMESTAMP '2017-07-09
14:28:10',     15     );
insert into RESULT
values (    77,     9,     5    ,5,     9,     5    ,TIMESTAMP '2017-07-
09 14:28:12',     10     );
insert into RESULT
values (    7    ,9,     1,     1,     9,     7    ,TIMESTAMP '2017-07-09
14:28:14',     6     );
insert into RESULT
values (    3,     9,     6,     6,     9,     9    ,TIMESTAMP '2017-07-09
14:28:16',     2     );
insert into RESULT
values (    33,     9    ,6,     6    ,9,     2     ,TIMESTAMP '2017-07-
09 14:28:09',     18     );
insert into RESULT
values (    11,     9,     2,     2    ,9,     4     ,TIMESTAMP '2017-07-
09 14:28:11',     12     );
insert into RESULT
values (    31    ,9,     2,     2,     9    ,6    ,TIMESTAMP '2017-07-
09 14:28:13',     8     );
insert into RESULT
values (    55    ,9,     7    ,7,     9    ,8    ,TIMESTAMP '2017-07-
09 14:28:15',     4     );
insert into RESULT
values (    27,     9,     7,     7    ,9    ,10     ,TIMESTAMP '2017-07-
09 14:28:17',     1     );
insert into RESULT
values (    19,     9,     10,     10,     9,     11     ,TIMESTAMP '2017-
07-09 14:29:08',     0     );
insert into RESULT
values (    18    ,9    ,10,     10,     9,     12     ,TIMESTAMP '2017-
07-09 14:09:08',     0     );
insert into RESULT
values (    8,     9    ,3,     3    ,9,     13     ,TIMESTAMP '2017-07-
09 14:31:08',     0    );
insert into RESULT
values (    20,     9    ,3    ,3    ,9    ,14     ,TIMESTAMP '2017-07-
09 14:32:08',     0     );
insert into RESULT
values (    14,     9,     4,     4    ,9,     15     ,TIMESTAMP '2017-07-
09 14:33:08',     0     );
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```sql
insert into RESULT
values (    2    ,9    ,4    ,4    ,9    ,16    ,TIMESTAMP '2017-07-
09 14:34:08',    0    );
insert into RESULT
values (    30,    9    ,7,7    ,9    ,17    ,TIMESTAMP '2017-07-09
14:35:08',    0    );
insert into RESULT
values (    94,    9,    8,    8,    9    ,18    ,TIMESTAMP '2017-07-
09 14:36:08',    0    );
insert into RESULT
values (    26,    9    ,9,    9    ,9,    19    ,TIMESTAMP '2017-07-
09 14:37:08',    0    );
insert into RESULT
values (    9    ,9    ,8    ,8,    9,    20    ,TIMESTAMP '2017-07-
09 14:38:08',    0    );
insert into RESULT
values (    10    ,9,    9,    9,    9,    21    ,TIMESTAMP '2017-07-
09 14:39:08',    0    );
insert into RESULT
values (    36    ,9    ,8,    8    ,9,    22    ,TIMESTAMP '2017-07-
09 14:40:08',    0    );
insert into RESULT
values (    28    ,9,    9,    9,    9,    23    ,TIMESTAMP '2017-07-
09 14:41:08',    0    );


insert into RESULT
values (    44,    10    ,5,    5    ,10    ,2    ,TIMESTAMP '2017-
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insert into RESULT
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16 16:35:59',    12    );
insert into RESULT
values (    77,    10,    5    ,5    ,10,    6    ,TIMESTAMP '2017-
07-16 16:36:10',    8    );
insert into RESULT
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16 16:36:30',    4    );
insert into RESULT
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07-16 16:36:50',    1    );
insert into RESULT
values (    33,    10,    6    ,6    ,10,    1    ,TIMESTAMP '2017-
07-16 16:35:56',    25    );
insert into RESULT
values (    11,    10,    2,    2    ,10,    3    ,TIMESTAMP '2017-
07-16 16:35:58',    15    );
insert into RESULT
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07-16 16:36:00',    10    );
insert into RESULT
values (    55,    10,    7,    7,    10,    7    ,TIMESTAMP '2017-
07-16 16:36:20',    6    );
insert into RESULT
values (    27    ,10,    7,    7    ,10    ,9    ,TIMESTAMP '2017-
07-16 16:36:40',    2    );
insert into RESULT
values (    19    ,10    ,10    ,10,    10,    11    ,TIMESTAMP '2017
-07-16 16:36:56',    0    );
insert into RESULT
values (    18    ,10,    10    ,10,10,    12    ,TIMESTAMP '2017-07-
16 16:37:56',    0    );
```

```sql
insert into RESULT
values (   8    ,10    ,3,    3    ,10    ,13    ,TIMESTAMP '2017-
07-16 16:38:56',    0    );
insert into RESULT
values (   20    ,10    ,3    ,3    ,10,    14    ,TIMESTAMP '2017-
07-16 16:39:56',    0    );
insert into RESULT
values (   14    ,10,    4    ,4    ,10    ,15    ,TIMESTAMP '2017-
07-16 16:40:56',    0    );
insert into RESULT
values (   2    ,10,    4,    4,    10    ,16    ,TIMESTAMP '2017-
07-16 16:41:56',    0    );
insert into RESULT
values (   30,    10    ,7    ,7    ,10    ,17    ,TIMESTAMP '2017-
07-16 16:42:56',    0    );
insert into RESULT
values (   94    ,10,    8,    8,    10    ,18    ,TIMESTAMP '2017-
07-16 16:43:56',    0    );
insert into RESULT
values (   26,    10    ,9,    9    ,10,    19    ,TIMESTAMP '2017-
07-16 16:44:56',    0    );
insert into RESULT
values (   9    ,10,    8    ,8    ,10,    20    ,TIMESTAMP '2017-
07-16 16:45:56',    0    );
insert into RESULT
values (   10    ,10    ,9,    9    ,10    ,21    ,TIMESTAMP '2017-
07-16 16:46:56',    0    );
insert into RESULT
values (   36    ,10    ,8,    8    ,10    ,22    ,TIMESTAMP '2017-
07-16 16:47:56',    0    );
insert into RESULT
values (   28    ,10,    9    ,9,    10    ,23    ,TIMESTAMP '2017-
07-16 16:48:56',    0    );


insert into RESULT
values (   44    ,11    ,5    ,5    ,11,    2    ,TIMESTAMP '2017-
07-30 14:24:15',    18    );
insert into RESULT
values (   5    ,11,    1,    1    ,11    ,1    ,TIMESTAMP '2017-07-
30 14:24:11',    25    );
insert into RESULT
values (   77    ,11,    5    ,5    ,11,    3    ,TIMESTAMP '2017-
07-30 14:24:22',    15    );
insert into RESULT
values (   7    ,11,    1,    1    ,11,    4    ,TIMESTAMP '2017-07-
30 14:24:34',    12    );
insert into RESULT
values (   3,    11    ,6,    6    ,11    ,17    ,TIMESTAMP '2017-
07-30 14:25:11',    0    );
insert into RESULT
values (   33,    11,6    ,6,11,    5    ,TIMESTAMP '2017-07-30
14:24:54',    10    );
insert into RESULT
values (   11,    11,    2,    2,    11,    7    ,TIMESTAMP '2017-
07-30 14:30:11',    6    );
insert into RESULT
values (   31    ,11    ,2    ,2,    11    ,10    ,TIMESTAMP '2017-
07-30 14:27:11',    1    );
insert into RESULT
values (   55    ,11,    7,    7    ,11    ,8    ,TIMESTAMP '2017-
07-30 14:28:11',    4    );
```

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insert into RESULT
values (    27    ,11     ,7,     7,     11,     11     ,TIMESTAMP '2017-
07-30 14:29:11',    0     );
insert into RESULT
values (    19    ,11     ,10,     10     ,11     ,6     ,TIMESTAMP '2017-
07-30 14:30:11',    8     );
insert into RESULT
values (    18,     11,     10,     10,     11,     16     ,TIMESTAMP '2017
-07-30 14:31:11',    0     );
insert into RESULT
values (    8,     11,     3,     3,     11,     20     ,TIMESTAMP '2017-
07-30 14:32:11',    0     );
insert into RESULT
values (    20     ,11,     3     ,3     ,11,     15     ,TIMESTAMP '2017-
07-30 14:33:11',    0     );
insert into RESULT
values (    14,     11,     4,     4     ,11     ,14     ,TIMESTAMP '2017-
07-30 14:34:11',    0     );
insert into RESULT
values (    2     ,11,     4     ,4     ,11     ,13     ,TIMESTAMP '2017-
07-30 14:35:11',    0     );
insert into RESULT
values (    30     ,11,     7,     7     ,11     ,19     ,TIMESTAMP '2017-
07-30 14:37:11',    0     );
insert into RESULT
values (    94     ,11     ,8,8     ,11,21     ,TIMESTAMP '2017-07-30
14:38:11',    0     );
insert into RESULT
values (    26     ,11     ,9     ,9     ,11     ,9     ,TIMESTAMP '2017-
07-30 14:39:11',    2     );
insert into RESULT
values (    9     ,11,     8     ,8     ,11,     18     ,TIMESTAMP '2017-
07-30 14:40:11',    0     );
insert into RESULT
values (    10     ,11,     9     ,9     ,11     ,22     ,TIMESTAMP '2017-
07-30 14:41:11',    0     );
insert into RESULT
values (    36,11,     8     ,8,     11     ,12     ,TIMESTAMP '2017-07-30
14:42:11',    0     );
insert into RESULT
values (    28,     11     ,9     ,9     ,11     ,23     ,TIMESTAMP '2017-
07-30 14:43:11',    0     );


insert into RESULT
values (    44     ,12     ,5     ,5     ,12,1     ,TIMESTAMP '2017-08-27
14:37:36',    25     );
insert into RESULT
values (    5     ,12,     1,     1,     12,     2     ,TIMESTAMP '2017-08-
27 14:37:38',    18     );
insert into RESULT
values (    77     ,12     ,5,     5,     12,     3     ,TIMESTAMP '2017-
08-27 14:37:39',    15     );
insert into RESULT
values (    7     ,12     ,1     ,1     ,12,     4     ,TIMESTAMP '2017-08-
27 14:37:40',    12     );
insert into RESULT
values (    3,     12,6     ,6,     12,     5     ,TIMESTAMP '2017-08-27
14:37:41',    10     );
insert into RESULT
values (    33     ,12,     6,     6,12,     6     ,TIMESTAMP '2017-08-27
14:37:42',    8     );
```

```sql
insert into RESULT
values (    11    ,12    ,2,    2,    12,    7    ,TIMESTAMP '2017-
08-27 14:37:43',    6    );
insert into RESULT
values (    31,    12,    2,    2    ,12,    8    ,TIMESTAMP '2017-
08-27 14:37:44',    4    );
insert into RESULT
values (    55    ,12,    7    ,7,    12,    9    ,TIMESTAMP '2017-
08-27 14:37:45',    2    );
insert into RESULT
values (    27,12    ,7,    7,    12,    10    ,TIMESTAMP '2017-08-27
14:37:46',    1    );
insert into RESULT
values (    19,    12    ,10    ,10,    12,    11    ,TIMESTAMP '2017
-08-27 14:38:36',    0    );
insert into RESULT
values (    18    ,12    ,10,    10,    12    ,12    ,TIMESTAMP '2017
-08-27 14:39:36',    0    );
insert into RESULT
values (    8    ,12    ,3    ,3    ,12    ,13    ,TIMESTAMP '2017-
08-27 14:40:36',    0    );
insert into RESULT
values (    20,    12    ,3    ,3,    12    ,14    ,TIMESTAMP '2017-
08-27 14:41:36',    0    );
insert into RESULT
values (    14,    12    ,4,    4    ,12    ,15    ,TIMESTAMP '2017-
08-27 14:42:36',    0    );
insert into RESULT
values (    2,    12,    4    ,4    ,12    ,16    ,TIMESTAMP '2017-
08-27 14:43:36',    0    );
insert into RESULT
values (    30    ,12,    7    ,7,    12    ,17    ,TIMESTAMP '2017-
08-27 14:44:36',    0    );
insert into RESULT
values (    94    ,12    ,8    ,8,    12    ,18    ,TIMESTAMP '2017-
08-27 14:45:36',    0    );
insert into RESULT
values (    26    ,12,    9,    9    ,12    ,19    ,TIMESTAMP '2017-
08-27 14:46:36',    0    );
insert into RESULT
values (    9    ,12,    8    ,8    ,12    ,20    ,TIMESTAMP '2017-
08-27 14:47:36',    0    );
insert into RESULT
values (    10,    12    ,9,    9,    12    ,21    ,TIMESTAMP '2017-
08-27 14:48:36',    0    );
insert into RESULT
values (    36    ,12,8    ,8    ,12,    22    ,TIMESTAMP '2017-08-27
14:49:36',    0    );
insert into RESULT
values (    28,    12,9    ,9,12    ,23    ,TIMESTAMP '2017-08-27
14:50:36',    0    );


insert into RESULT
values (    44,    13,    5    ,5,    13    ,10    ,TIMESTAMP '2017-
09-03 14:34:14',    1    );
insert into RESULT
values (    5    ,13,    1,    1    ,13,    9    ,TIMESTAMP '2017-09-
03 14:34:12',    2    );
insert into RESULT
values (    77    ,13    ,5    ,5    ,13,    8    ,TIMESTAMP '2017-
09-03 14:34:10',    4    );
```

```sql
insert into RESULT
values (    7     ,13     ,1     ,1     ,13     ,7     ,TIMESTAMP '2017-09-03 14:34:09',     6     );
insert into RESULT
values (    3     ,13     ,6     ,6     ,13     ,6     ,TIMESTAMP '2017-09-03 14:34:08',     8     );
insert into RESULT
values (    33,     13,     6,     6     ,13,     5     ,TIMESTAMP '2017-09-03 14:34:07',     10     );
insert into RESULT
values (    11     ,13     ,2     ,2     ,13     ,4     ,TIMESTAMP '2017-09-03 14:34:05',     12     );
insert into RESULT
values (    31     ,13     ,2     ,2     ,13     ,3     ,TIMESTAMP '2017-09-03 14:34:03',     15     );
insert into RESULT
values (    55     ,13     ,7     ,7     ,13,     2     ,TIMESTAMP '2017-09-03 14:34:01',     18     );
insert into RESULT
values (    27     ,13,     7     ,7     ,13     ,1     ,TIMESTAMP '2017-09-03 14:34:53',     25     );
insert into RESULT
values (    19     ,13,     10,     10,     13,     11     ,TIMESTAMP '2017-09-03 14:36:53',     0     );
insert into RESULT
values (    18,     13     ,10     ,10     ,13,     12     ,TIMESTAMP '2017-09-03 14:37:53',     0     );
insert into RESULT
values (    8     ,13     ,3     ,3     ,13     ,13     ,TIMESTAMP '2017-09-03 14:38:53',     0     );
insert into RESULT
values (    20     ,13     ,3     ,3     ,13     ,14     ,TIMESTAMP '2017-09-03 14:39:53',     0     );
insert into RESULT
values (    14     ,13,     4     ,4     ,13     ,15     ,TIMESTAMP '2017-09-03 14:40:53',     0     );
insert into RESULT
values (    2,     13,     4,     4     ,13     ,16     ,TIMESTAMP '2017-09-03 14:41:53',     0     );
insert into RESULT
values (    30     ,13     ,7     ,7,     13     ,17     ,TIMESTAMP '2017-09-03 14:42:53',     0     );
insert into RESULT
values (    94,     13,     8,     8     ,13     ,18     ,TIMESTAMP '2017-09-03 14:43:53',     0     );
insert into RESULT
values (    26,     13,     9,     9,     13     ,19     ,TIMESTAMP '2017-09-03 14:44:53',     0     );
insert into RESULT
values (    9     ,13,     8,     8     ,13,     20     ,TIMESTAMP '2017-09-03 14:45:53',     0     );
insert into RESULT
values (    10,     13,     9     ,9,     13     ,21     ,TIMESTAMP '2017-09-03 14:46:53',     0     );
insert into RESULT
values (    36     ,13     ,8,     8,     13,     22     ,TIMESTAMP '2017-09-03 14:47:53',     0     );
insert into RESULT
values (    28,     13     ,9,     9     ,13     ,23     ,TIMESTAMP '2017-09-03 14:48:53',     0     );
```

3.

   a.   select d.driver_id, count(r.driver_id) Num_of_races, round(avg(r.finish_position),2),
round(avg(r.points),2), d.team_no, d.lastname, d.firstname, d.country
from driver d, result r
where d.driver_id = r.driver_id
group by d.driver_id, d.team_no, d.lastname, d.firstname, d.country

DRIVER_ID	NUM_OF_RACES	ROUND(AVG(R.FINISH_POSITION),2)	ROUND(AVG(R.POINTS),2)	TEAM_NO	LASTNAME	FIRSTNAME	COUNTRY
26	14	16.86	.43	9	Kvyat	Daniil	Russian Federation
36	14	19.86	0	8	Giovinazzi	Antonio	Italy
3	14	9.36	4.43	6	Ricciardo	Daniel	Australia
27	14	8.14	6.07	7	Hülkenberg	Nico	Germany
33	14	4	13.43	6	Verstappen	Max	Netherlands
18	14	12.86	0	10	Stroll	Lance	Canada
8	14	14.5	0	3	Grosjean	Romain	France
20	14	14.21	0	3	Magnussen	Kevin	Denmark
44	13	3.38	17.31	5	Hamilton	Lewis	United Kingdom
9	14	19.57	0	8	Ericsson	Marcus	Sweeden
11	14	5.14	9.86	2	Pérez	Sergio	Mexico
30	14	17.43	0	7	Palmer	Jolyon	United Kingdom
28	14	23	0	9	Hartley	Brendon	Australia
2	14	15.36	0	4	Vandoorne	Lewis	Belgium
10	14	21.21	0	9	Gasly	Pierre	France
55	14	6.79	6.86	7	Sainz Jr.	Carlos	Spain
94	14	18.64	0	8	Wehrlein	Pascal	Germany
5	14	3.79	14.57	1	Vettel	Sebastian	Germany
77	14	4.93	10.57	5	Bottas	Valtteri	Finland
7	14	5.86	8.29	1	Räikkönen	Kimi	Finland
31	14	6.5	7.43	2	Ocon	Esteban	France
19	14	9.93	1.71	10	Massa	Felipe	Brazil
14	14	14.79	0	4	Alonso	Fernando	Spain

23 rows returned in 0.01 seconds   Download

   b.   select r.track, to_char(r.month, 'Month') Month, NVL2(rt.race_number, 'Yes', 'No')
Race_took_place, round(avg(to_char(rt.finish_time,'sssss')),2) Average_Finish_Time,
rt.race_number
from race r
FULL JOIN result rt
ON r.race_number = rt.race_number
group by r.track, r.month, rt.race_number

TRACK	MONTH	RACE_TOOK_PLACE	AVERAGE_FINISH_TIME	RACE_NUMBER
Barcelona	May	Yes	52801.22	5
Spa-Francorchamps	August	Yes	52895.74	12
Monte Carlo	May	Yes	52324.09	6
Shanghai	April	Yes	31295.74	2
Bahrain	April	Yes	63546.57	3
Spielberg	July	Yes	52272.57	9
Budapest	July	Yes	52329.3	11
Monza	September	Yes	52746.57	13
Melbourne	March	Yes	27139.95	1
Singapore	September	No	-	-
Baku	June	Yes	56346.57	8
Silverstone	July	Yes	60001.22	10
Sochi	April	Yes	52327.35	4
Montreal	June	Yes	74495.74	7

14 rows returned in 0.00 seconds   Download