Advance Views

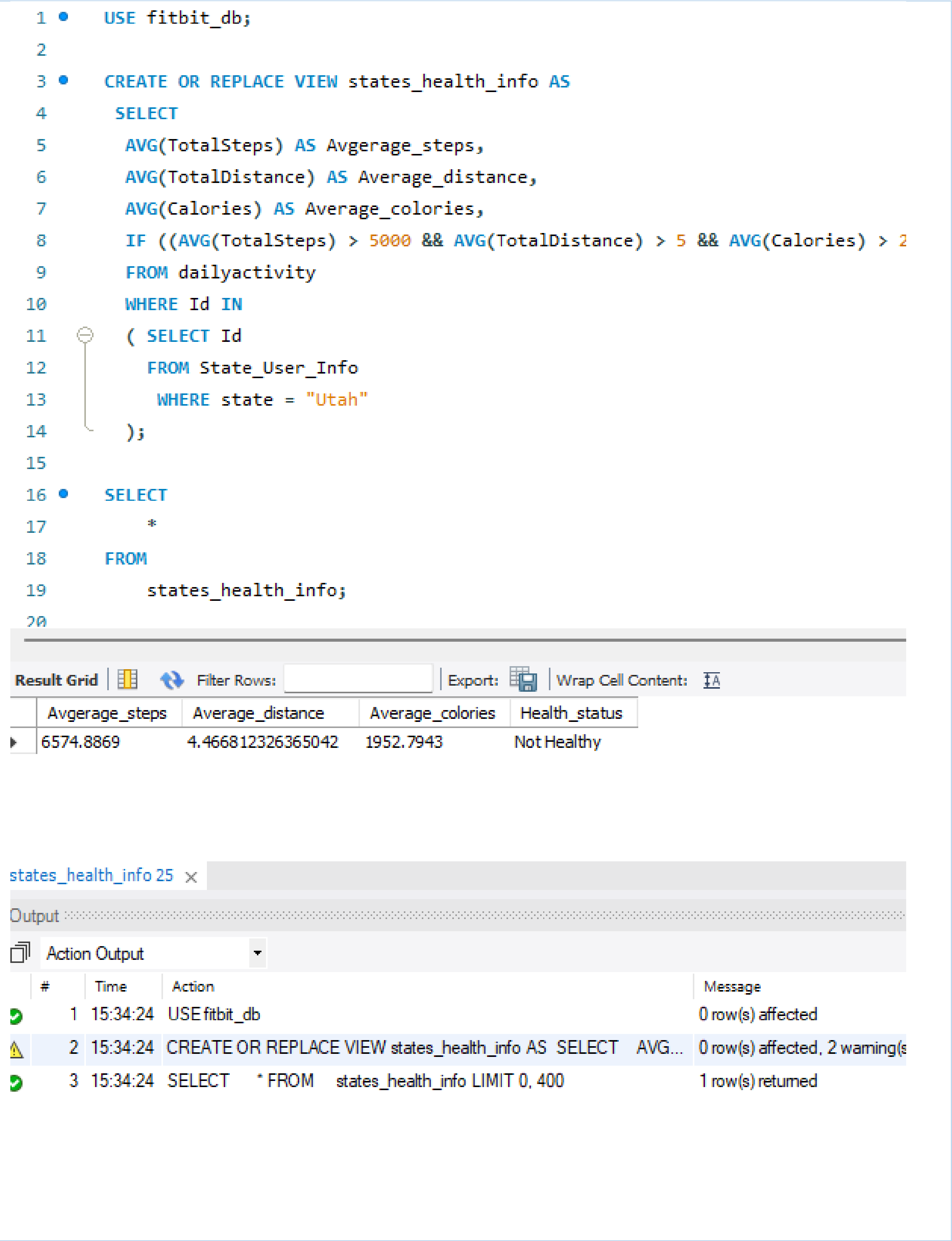
View Name: STATES_HEALTH_INFO

This view calculates a state residents' average steps counts, average distance traveled, and calories burned, and compares it with standard recommendations to categorize the state as a healthy state or unhealthy state.

SQL Code:

```
USE fitbit_db;

CREATE OR REPLACE VIEW states_health_info AS
 SELECT
  AVG(TotalSteps) AS Avgerage_steps,
  AVG(TotalDistance) AS Average_distance,
  AVG(Calories) AS Average_colories,
  IF ((AVG(TotalSteps) > 5000 && AVG(TotalDistance) > 5 && AVG(Calories) > 2000) ,
"Healthy" , "Not Healthy") AS Health_status
  FROM dailyactivity
  WHERE Id IN
  ( SELECT Id
    FROM State_User_Info
     WHERE state = "Utah"
  );

SELECT
    *
FROM
    states_health_info;
```

Results:



```
USE fitbit_db;

CREATE OR REPLACE VIEW states_health_info AS
 SELECT
  AVG(TotalSteps) AS Avgerage_steps,
  AVG(TotalDistance) AS Average_distance,
  AVG(Calories) AS Average_colories,
  IF ((AVG(TotalSteps) > 5000 && AVG(TotalDistance) > 5 && AVG(Calories) > 2
  FROM dailyactivity
  WHERE Id IN
  ( SELECT Id
    FROM State_User_Info
     WHERE state = "Utah"
  );

SELECT
    *
FROM
    states_health_info;
```

```
Avgerage_steps   Average_distance     Average_colories   Health_status
6574.8869        4.466812326365042    1952.7943          Not Healthy
```

```
#  Time      Action                                                       Message
1  15:34:24  USE fitbit_db                                                0 row(s) affected
2  15:34:24  CREATE OR REPLACE VIEW states_health_info AS  SELECT   AVG...  0 row(s) affected, 2 warning(s
3  15:34:24  SELECT   * FROM   states_health_info LIMIT 0, 400             1 row(s) returned
```

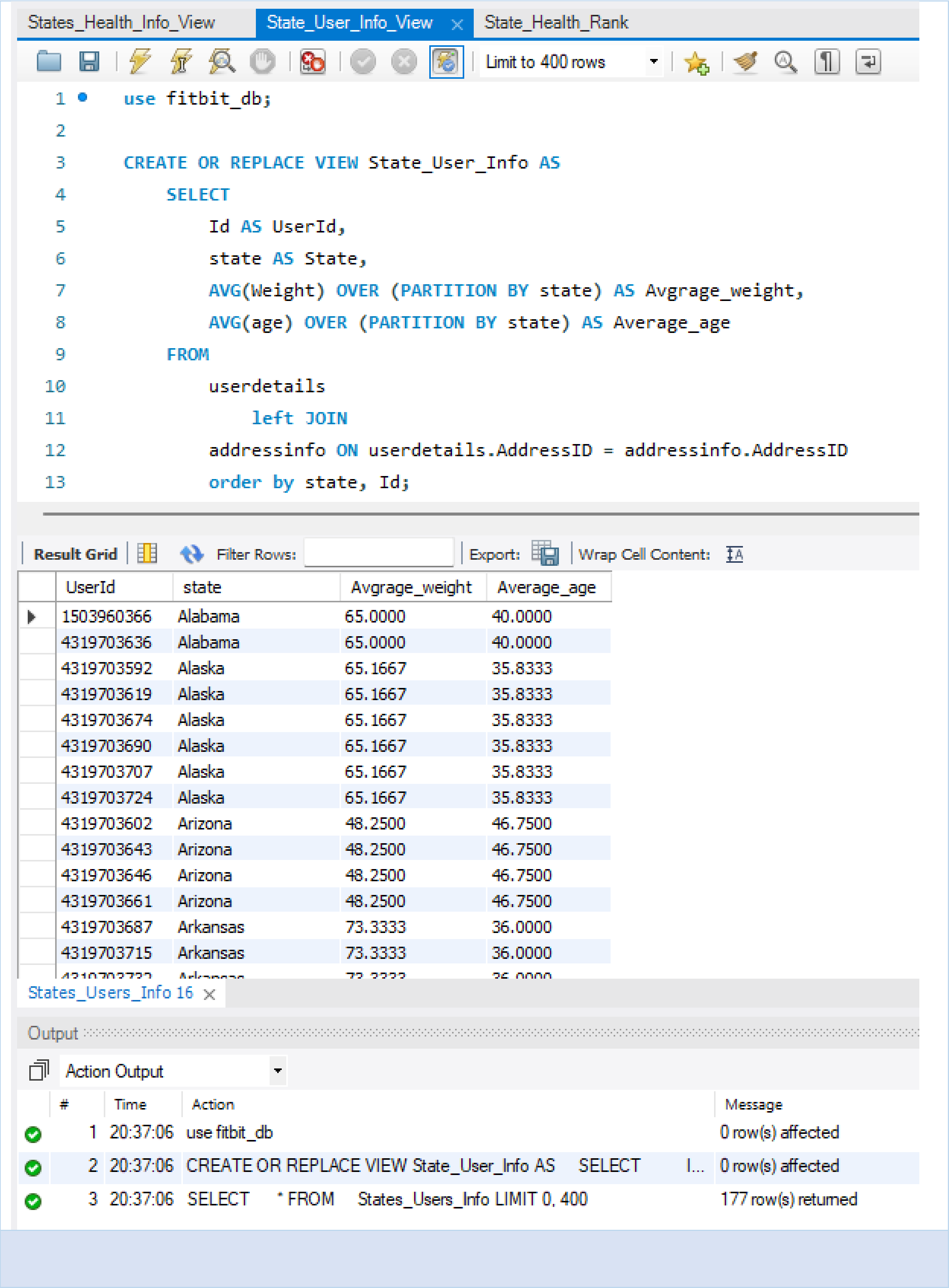
View Name: STATES_HEALTH_INFO

This view returns state wise userId, average weight and average age.

SQL Code:

```
use fitbit_db;

CREATE OR REPLACE VIEW State_User_Info AS
    SELECT
        Id AS UserId,
        state AS State,
                AVG(Weight) OVER (PARTITION BY state) AS Avgrage_weight,
        AVG(age) OVER (PARTITION BY state) AS Average_age
    FROM
        userdetails
            left JOIN
        addressinfo ON userdetails.AddressID = addressinfo.AddressID
        order by state, Id;

SELECT
    *
FROM
    States_Users_Info;
```

Results:



```sql
use fitbit_db;

CREATE OR REPLACE VIEW State_User_Info AS
    SELECT
        Id AS UserId,
        state AS State,
        AVG(Weight) OVER (PARTITION BY state) AS Avgrage_weight,
        AVG(age) OVER (PARTITION BY state) AS Average_age
    FROM
        userdetails
            left JOIN
        addressinfo ON userdetails.AddressID = addressinfo.AddressID
        order by state, Id;
```

UserId	state	Avgrage_weight	Average_age
1503960366	Alabama	65.0000	40.0000
4319703636	Alabama	65.0000	40.0000
4319703592	Alaska	65.1667	35.8333
4319703619	Alaska	65.1667	35.8333
4319703674	Alaska	65.1667	35.8333
4319703690	Alaska	65.1667	35.8333
4319703707	Alaska	65.1667	35.8333
4319703724	Alaska	65.1667	35.8333
4319703602	Arizona	48.2500	46.7500
4319703643	Arizona	48.2500	46.7500
4319703646	Arizona	48.2500	46.7500
4319703661	Arizona	48.2500	46.7500
4319703687	Arkansas	73.3333	36.0000
4319703715	Arkansas	73.3333	36.0000
4319703732	Arkansas	73.3333	36.0000

#	Time	Action	Message
1	20:37:06	use fitbit_db	0 row(s) affected
2	20:37:06	CREATE OR REPLACE VIEW State_User_Info AS SELECT I...	0 row(s) affected
3	20:37:06	SELECT * FROM States_Users_Info LIMIT 0, 400	177 row(s) returned

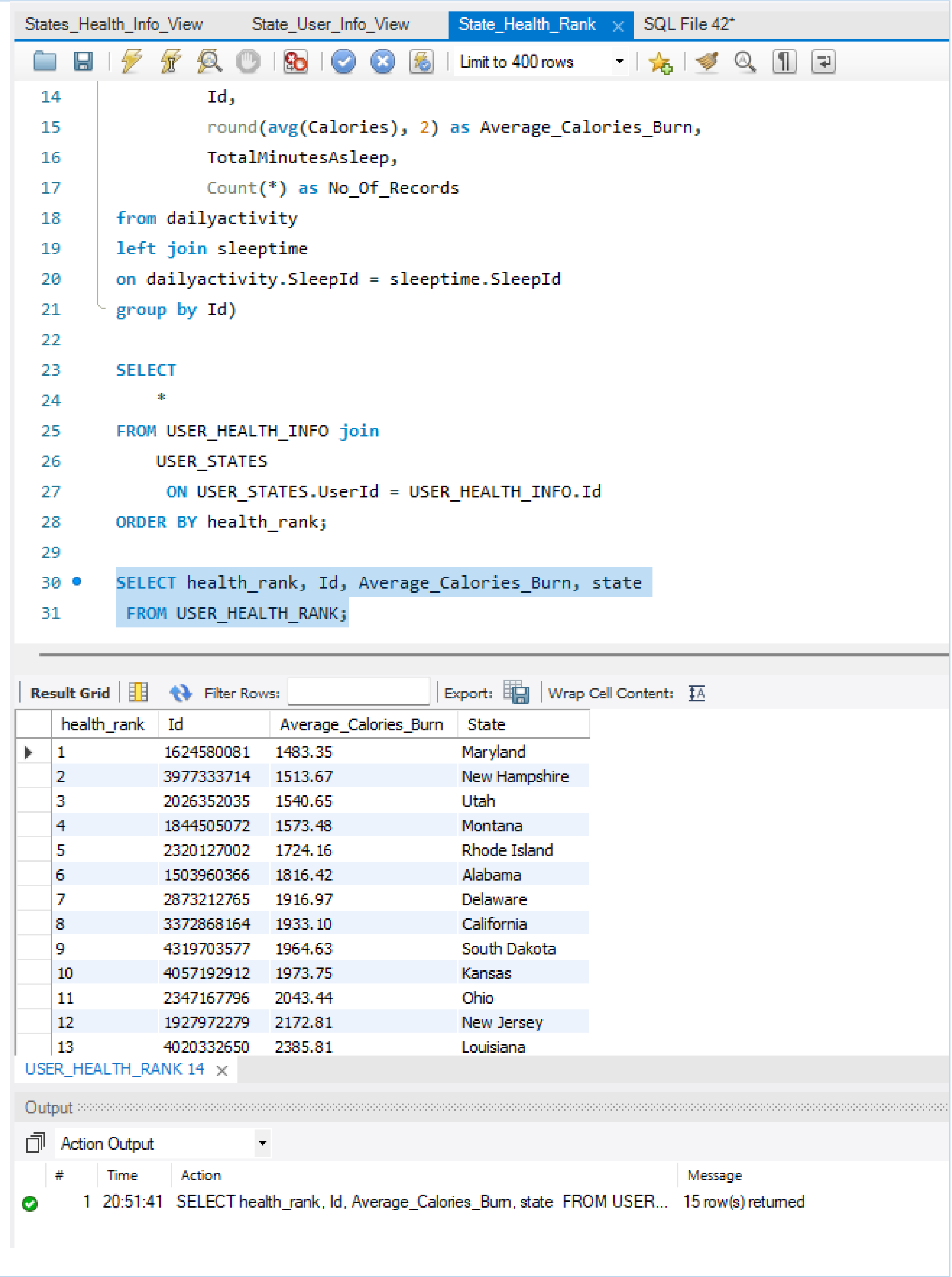
View Name: USER_HEALTH_RANK

This view assigns the rank to the user based on the avg calories burn.

SQL Code:

```
use fitbit_db;

CREATE OR REPLACE VIEW USER_HEALTH_RANK AS
WITH USER_STATES as
( SELECT
        Id AS UserId,
        state AS State
   FROM userdetails
        left JOIN
      addressinfo ON userdetails.AddressID = addressinfo.AddressID ),

USER_HEALTH_INFO as
( Select DENSE_RANK() OVER (ORDER BY avg(Calories)) AS 'health_rank',
      Id,
                round(avg(Calories), 2) as Average_Calories_Burn,
      TotalMinutesAsleep,
      Count(*) as No_Of_Records
from dailyactivity
left join sleeptime
on dailyactivity.SleepId = sleeptime.SleepId
group by Id)

SELECT
   *
FROM USER_HEALTH_INFO join
   USER_STATES
    ON USER_STATES.UserId = USER_HEALTH_INFO.Id
ORDER BY health_rank;

SELECT health_rank, Id, Average_Calories_Burn, state
 FROM USER_HEALTH_RANK;
```

Results:



```
                Id,
                round(avg(Calories), 2) as Average_Calories_Burn,
                TotalMinutesAsleep,
                Count(*) as No_Of_Records
        from dailyactivity
        left join sleeptime
        on dailyactivity.SleepId = sleeptime.SleepId
        group by Id)

        SELECT
            *
        FROM USER_HEALTH_INFO join
            USER_STATES
             ON USER_STATES.UserId = USER_HEALTH_INFO.Id
        ORDER BY health_rank;

        SELECT health_rank, Id, Average_Calories_Burn, state
         FROM USER_HEALTH_RANK;
```

health_rank	Id	Average_Calories_Burn	State
1	1624580081	1483.35	Maryland
2	3977333714	1513.67	New Hampshire
3	2026352035	1540.65	Utah
4	1844505072	1573.48	Montana
5	2320127002	1724.16	Rhode Island
6	1503960366	1816.42	Alabama
7	2873212765	1916.97	Delaware
8	3372868164	1933.10	California
9	4319703577	1964.63	South Dakota
10	4057192912	1973.75	Kansas
11	2347167796	2043.44	Ohio
12	1927972279	2172.81	New Jersey
13	4020332650	2385.81	Louisiana

```
  #   Time      Action                                                         Message
  1   20:51:41  SELECT health_rank, Id, Average_Calories_Burn, state  FROM USER...   15 row(s) returned
```