**Nutrition Database Source Code**

create database nutrition;

use nutrition;

create table nutrition

(

food VARCHAR(255),

caloric\_value INT,

fat FLOAT,

saturated\_fats FLOAT,

monounsaturated\_fats FLOAT,

polyunsaturated\_fats FLOAT,

carbohydrates FLOAT,

sugars FLOAT,

protein FLOAT,

dietary\_fiber FLOAT,

cholesterol FLOAT,

sodium FLOAT,

water FLOAT,

vitamin\_a FLOAT,

vitamin\_b1 FLOAT,

vitamin\_b11 FLOAT,

vitamin\_b12 FLOAT,

vitamin\_b2 FLOAT,

vitamin\_b3 FLOAT,

vitamin\_b5 FLOAT,

vitamin\_b6 FLOAT,

vitamin\_c FLOAT,

vitamin\_d FLOAT,

vitamin\_e FLOAT,

vitamin\_k FLOAT,

calcium FLOAT,

copper FLOAT,

iron FLOAT,

magnesium FLOAT,

manganese FLOAT,

phosphorus FLOAT,

potassium FLOAT,

selenium FLOAT,

zinc FLOAT,

nutrition\_density FLOAT

);

## Q1. Find the Top 10 Foods with the Highest Caloric Value

select food,

max(caloric\_value) as caloric

from nutrition

group by food

order by caloric

desc limit 10;

## Q2. Identify top 10 Foods with More than 10g of Protein and Less than 5g of Fat

select food,

protein,fat

from nutrition

where protein > 10

and fat < 5

order by protein

desc limit 10;

## Q3. Calculate the top 10 Highest Average Sodium Content in Foods with Saturated Fats Above 5g

select food ,

round(avg(sodium),2)

as avg\_sodium

from nutrition

where saturated\_fats > 5

group by food

order by avg\_sodium

desc limit 10;

## Q4. List those foods which fiber is greater than 18 but sugars is lessthan 4

select food,dietary\_fiber,

sugars from nutrition

where dietary\_fiber > 18

and sugars < 4;

## Q5. List the Top 5 Foods by Vitamin C Content

select food,

max(vitamin\_c) as vitamin\_c

from nutrition

group by food

order by vitamin\_c

desc limit 5;

## Q6. Identify Foods with the Highest and Lowest Potassium-to-Sodium Ratio

select food,

round(potassium/sodium, 2)

as Highest\_Potassium\_to\_Sodium\_Ratio

from nutrition

order by Highest\_Potassium\_to\_Sodium\_Ratio

desc limit 1;

select food,

round(potassium/sodium ,2)

as lowest\_Potassium\_to\_Sodium\_Ratio

from nutrition

where Potassium >0

and sodium > 0

order by lowest\_Potassium\_to\_Sodium\_Ratio

asc limit 1 ;

## Q7. Identify the Top 3 Foods Rich in Vitamin A and Vitamin C

select food,

vitamin\_a, vitamin\_c,

(vitamin\_a + vitamin\_c) as rich\_food

from nutrition

order by rich\_food

desc limit 3;

## Q8. Find Top 10 Foods with Above-Average Nutrition Density

select food,

nutrition\_density from nutrition

where nutrition\_density

>(select avg(nutrition\_density)

from nutrition)

order by nutrition\_density

desc limit 10;

## Q9. List Foods with a Vitamin K Content Greater Than 50% of Their Total Vitamin Content

select food , vitamin\_k ,

(vitamin\_a + vitamin\_b1

+ vitamin\_b11 + vitamin\_b12

+ vitamin\_b2 + vitamin\_b3

+ vitamin\_b5 + vitamin\_b6

+ vitamin\_c + vitamin\_d

+ vitamin\_e + vitamin\_k )

as total\_vitamin

from nutrition

where vitamin\_k > 0.5\*

(vitamin\_a + vitamin\_b1

+ vitamin\_b11 + vitamin\_b12

+ vitamin\_b2 + vitamin\_b3

+ vitamin\_b5 + vitamin\_b6

+ vitamin\_c + vitamin\_d

+ vitamin\_e + vitamin\_k );

## Q10. Find Foods with an Unusual Combination of Protein greter than 80 and Sodium less than 80

select food,protein,

sodium from nutrition

where protein > 80

and sodium < 80;