

Place Aggregations:

1. The average price of commodity "Bread" in each country
2. The average price of commodity "Wheat" in each locality of the country "Afghanistan"
3. The highest price of commodity "Rice" in each market type in each country
4. The lowest price of commodity "Bread" in each market in the country "Afghanistan"

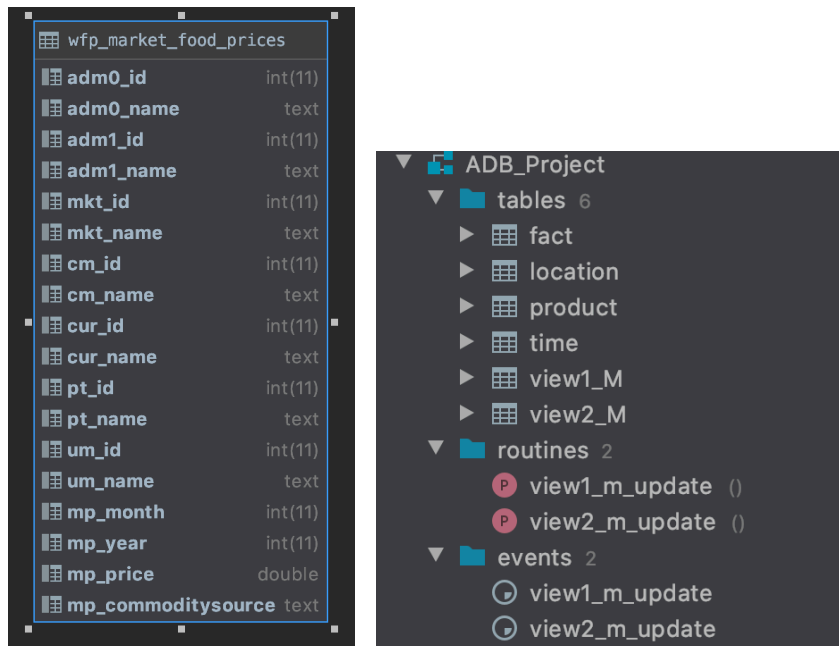
Time Aggregations:

1. The average price of commodity "Bread" each year in the country "Afghanistan"
2. The highest price of commodity "Rice" each month in the country "Algiers"

Commodity Aggregations:

1. The lowest price of each commodity in the market "Algeria"
2. The commodity (name) which has highest price in the market "Algeria"

ODB:

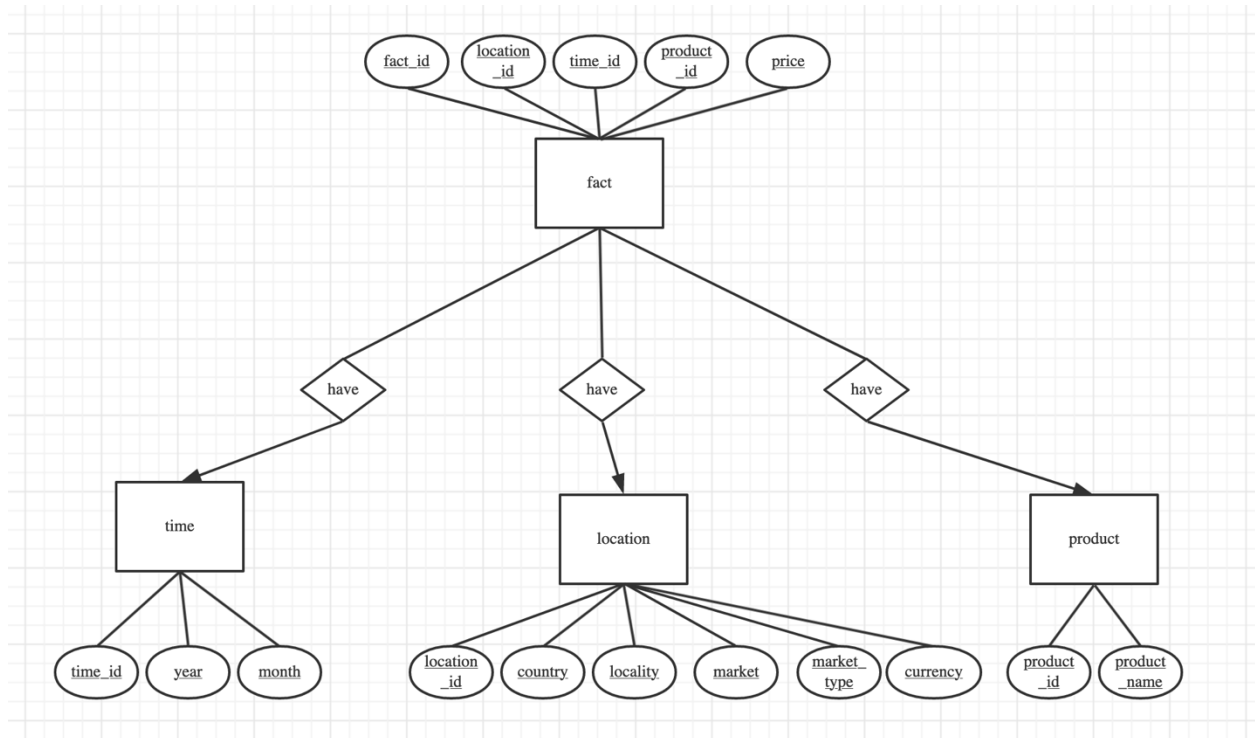


```
create schema ODB_Project;
```

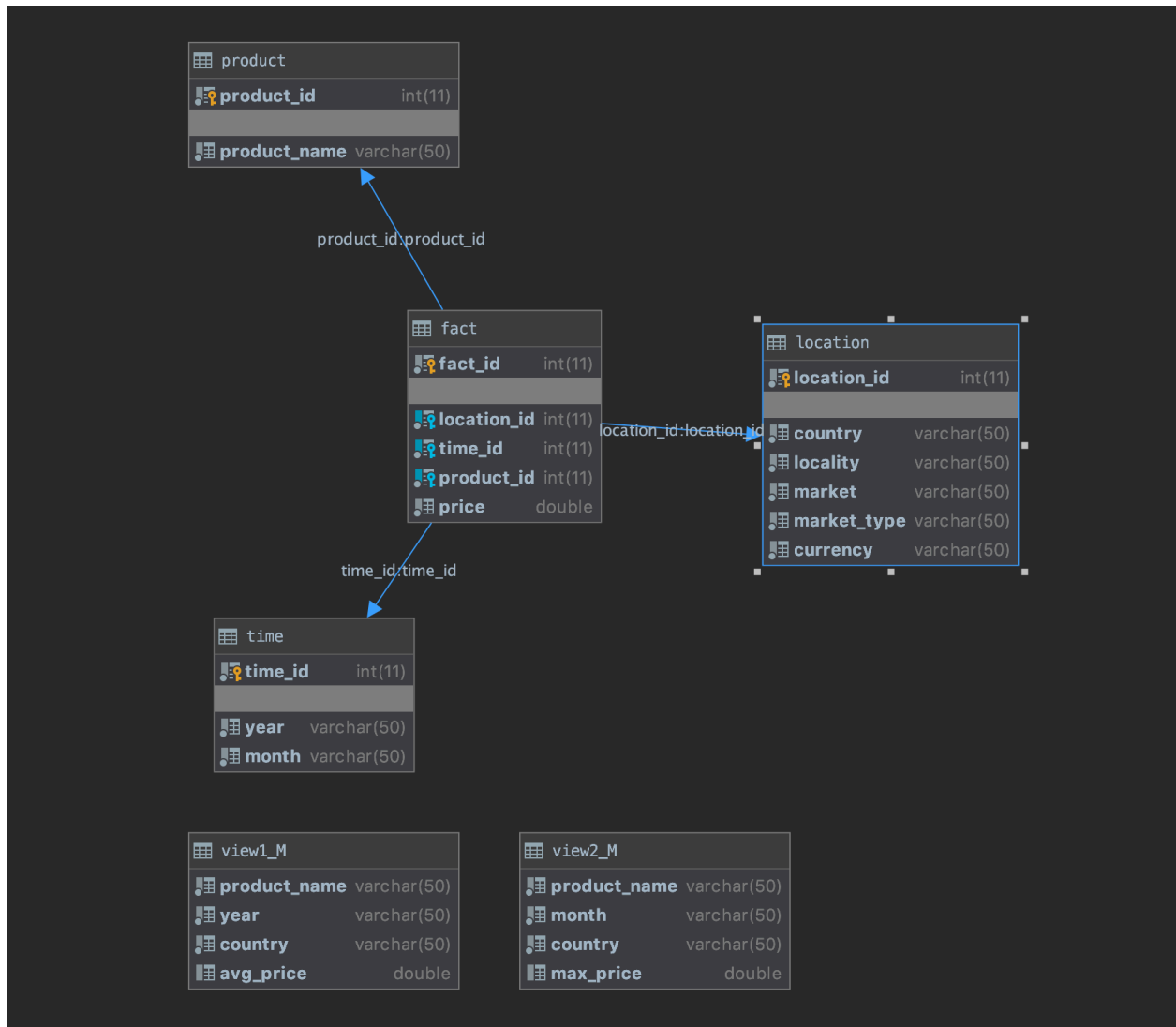
```
create table wfp_market_food_prices
```

```
(  
  adm0_id      int null,  
  adm0_name    text null,  
  adm1_id      int null,  
  adm1_name    text null,  
  mkt_id       int null,  
  mkt_name     text null,  
  cm_id        int null,  
  cm_name      text null,  
  cur_id       int null,  
  cur_name     text null,  
  pt_id        int null,  
  pt_name      text null,  
  um_id        int null,  
  um_name      text null,  
  mp_month     int null,  
  mp_year      int null,  
  mp_price     double null,  
  mp_commoditysource text null  
);
```

ADB:



```
mysqldump -u root -p mysql --databases ADB_Project -R -E > ADB_Project.sql
```



```
create schema ADB_Project;
```

```
create table location
```

```
(
    location_id int auto_increment
        primary key,
    country   varchar(50) not null,
    locality  varchar(50) not null,
    market   varchar(50) not null,
    market_type varchar(50) not null,
    currency  varchar(50) not null
);
```

```
create table product
```

```
(
```

```

    product_id int auto_increment
        primary key,
    product_name varchar(50) not null
);

```

```

create table time
(
    time_id int auto_increment
        primary key,
    year varchar(50) not null,
    month varchar(50) not null
);

```

```

create table fact
(
    fact_id int auto_increment
        primary key,
    location_id int not null,
    time_id int not null,
    product_id int not null,
    price double not null,
    constraint fact_location_location_id_fk
        foreign key (location_id) references location (location_id),
    constraint fact_product_product_id_fk
        foreign key (product_id) references product (product_id),
    constraint fact_time_time_id_fk
        foreign key (time_id) references time (time_id)
);

```

```

insert into ADB_Project.location (country, locality, market, market_type,currency) (select
distinct adm0_name,adm1_name,mkt_name,pt_name,cur_name from
ODB_Project.wfp_market_food_prices);

```

```

insert into ADB_Project.product (product_name) (select distinct cm_name from
ODB_Project.wfp_market_food_prices);

```

```

insert into ADB_Project.time (year, month) (select distinct mp_year,mp_month from
ODB_Project.wfp_market_food_prices);

```

```

insert into ADB_Project.fact (location_id, time_id, product_id, price)
(select (select l.location_id from ADB_Project.location as l where l.country=o.adm0_name and
l.locality=o.adm1_name and l.market=o.mkt_name and l.market_type=o.pt_name and
l.currency=o.cur_name),(select t.time_id from ADB_Project.time as t where t.year=o.mp_year

```

```
and t.month=o.mp_month),(select p.product_id from ADB_Project.product as p where
p.product_name=o.cm_name),o.mp_price
from ODB_Project.wfp_market_food_prices as o);
```

```
create table ADB_Project.view1_M as select p.product_name,t.year,l.country,avg(f.price) as
avg_price from ADB_Project.time as t,ADB_Project.fact as f,ADB_Project.product as
p,ADB_Project.location as l where f.time_id=t.time_id and f.product_id=p.product_id and
f.location_id=l.location_id group by t.year,p.product_name,l.country;
```

```
create table ADB_Project.view2_M as select p.product_name,t.month,l.country,max(f.price) as
max_price from ADB_Project.time as t,ADB_Project.fact as f,ADB_Project.product as
p,ADB_Project.location as l where f.time_id=t.time_id and f.product_id=p.product_id and
f.location_id=l.location_id group by t.month,p.product_name,l.country;
```

```
set global event_scheduler=1;
```

```
delimiter //
create procedure ADB_Project.view1_m_update()
begin
drop table if exists ADB_Project.view1_M;
create table ADB_Project.view1_M as select p.product_name,t.year,l.country,avg(f.price) as
avg_price from ADB_Project.time as t,ADB_Project.fact as f,ADB_Project.product as
p,ADB_Project.location as l where f.time_id=t.time_id and f.product_id=p.product_id and
f.location_id=l.location_id group by t.year,p.product_name,l.country;
end//
```

```
create procedure ADB_Project.view2_m_update()
begin
drop table if exists ADB_Project.view2_M;
create table ADB_Project.view2_M as select p.product_name,t.month,l.country,max(f.price) as
max_price from ADB_Project.time as t,ADB_Project.fact as f,ADB_Project.product as
p,ADB_Project.location as l where f.time_id=t.time_id and f.product_id=p.product_id and
f.location_id=l.location_id group by t.month,p.product_name,l.country;
end//
```

```
create event view1_m_update
on schedule every 1 year
on completion preserve enable
do
begin
call ADB_Project.view1_m_update();
end //
```

```
create event view2_m_update
on schedule every 1 month
on completion preserve enable
do
begin
call ADB_Project.view2_m_update();
end //

delimiter ;
```