**分析函数专章:**

**3.01 sum(),max(),min(),avg()**

**sum**(t.amt) **over**(**partition** **by** t.b1,t.c1) **sum**

**3.02 row\_number(),rank(),dense\_rank()**

row\_number()排序是流水排序,遇到相同的数据依然会排成不同的序号;

rank()排序是遇到相同的数据会排成相同的序号,下一条数据会散列排序;

dense\_rank()遇到相同的数据会排成相同的序号,下一条数据会紧凑排序;

**3.03\* first\_value(),last\_value()**

**3.04 count()**

count(t.amt) over(partition by t.b1,t.c1) count

**3.99 举例**

create table etl.az1

(

    a1 varchar(100),

    b1 varchar(100),

    c1 varchar(100),

    amt numeric(24,2)

);

insert into etl.az1 values ("p001","q1","w1","120");

insert into etl.az1 values ("p002","q1","w1","80" );

insert into etl.az1 values ("p003","q1","w1","100");

insert into etl.az1 values ("p004","q1","w2","30" );

insert into etl.az1 values ("p005","q1","w2","50" );

insert into etl.az1 values ("p006","q1","w2","70" );

insert into etl.az1 values ("p101","q2","w1","160");

insert into etl.az1 values ("p102","q2","w1","240");

insert into etl.az1 values ("p103","q2","w1","200");

insert into etl.az1 values ("p104","q2","w2","270");

insert into etl.az1 values ("p105","q2","w2","300");

insert into etl.az1 values ("p106","q2","w2","330");

select

       t.\*

       ,sum(t.amt) over(partition by t.b1,t.c1) sum

       ,median(t.amt) over(partition by t.b1,t.c1) median

       ,max(t.amt) over(partition by t.b1,t.c1) max

       ,min(t.amt) over(partition by t.b1,t.c1) min

       ,avg(t.amt) over(partition by t.b1,t.c1) avg

       ,row\_number() over(partition by t.b1,t.c1 order by t.amt desc) row\_number

       ,rank()       over(partition by t.b1,t.c1 order by t.amt desc) rank

       ,dense\_rank() over(partition by t.b1,t.c1 order by t.amt desc) dense\_rank

       ,first\_value(t.amt) over(partition by t.b1,t.c1 order by t.amt desc) first\_value

       ,last\_value(t.amt)  over(partition by t.b1,t.c1 order by t.amt desc) last\_value

from etl.az1 t