Optimization of machine downtime sql

create table md\_1219(

Date date,

Assembly\_Line\_No varchar(40),

Machion\_ID varchar(40),

Hydraulic\_Pressure float,

Coolant\_Pressure float,

Air\_System\_Pressure float,

Coolant\_Temparature float,

Hydraulic\_Oil\_Temaparature float,

Spindle\_Bearing\_Temparature float,

Spindle\_Vibration float,

Tool\_Vibration float,

Spindle\_Speed int,

Voltage int,

Torque float,

Cutting float,

Downtime varchar(40)

);

select\*from md\_1219;

select count(\*)from md\_1219;

select\*from md\_1219 order by 1;

select distinct downtime from md\_1219;

select voltage,torque,spindle\_speed,cutting,downtime

from md\_1219

group by (voltage,torque,spindle\_speed,cutting,downtime)

order by downtime;

select downtime, max(torque) as max\_torque

from md\_1219

group by downtime;

select e.\*,

row\_number() over (partition by downtime order by date)as rn

from md\_1219 e;

select \* from(

select e.\*,

rank() over(partition by downtime order by spindle\_speed desc) as rnk

from md\_1219 e) x

where x.rnk <3;

select e.\*,

lag(torque) over (partition by downtime order by torque) from md\_1219 e;

select min (spindle\_speed) as spindle\_speed from machinedowntime\_111

where downtime = 'no\_machie\_failure';

select max(spindle\_speed) as max\_spindle\_speed from machinedowntime\_111

where downtime='machine\_failure';

select min (torque) as min\_toque from machinedowntime\_111

where downtime = 'no\_machie\_failure';

select \* from machinedowntime\_111

where downtime = 'no\_machie\_failure';

select \*

from machinedowntime\_111

where downtime = 'no\_machie\_failure';

select max(torque) as max\_torque from machinedowntime\_111

where downtime='machine\_failure';

select \* from machinedowntime\_111

where downtime = 'Machine\_Failure';

select \*

from machinedowntime\_111

where downtime = (select 'no\_machine\_failed' from machinedowntime\_111);

select max(cutting) as max\_cutting from machinedowntime\_111;