Однотабличные запросы   
  
1   
SELECT name,surname   
FROM students   
where score between 2 and 5   
  
1   
SELECT name,surname   
FROM students   
where score >2 and score <5   
  
2   
SELECT name,surname   
FROM students   
where "N-GR" >1999   
  
SELECT name,surname,"N-GR"   
from students   
where "N-GR" like '2\_\_\_'   
  
3   
SELECT name,surname,"N-GR"   
from students   
where to\_char(BDT, 'YYYY') like '2\_\_\_'   
  
4   
SELECT name,surname,"N-GR"   
from students   
where to\_char(BDT, 'MONTH')=JUNE   
  
5   
SELECT name,surname,"N-GR"   
from students   
where to\_char(BDT, 'MONTH')=to\_char(sysdate, 'MONTH')   
  
6   
SELECT name,surname,"N-GR"   
from students   
order by "N-GR"   
  
7   
SELECT name,surname,"N-GR"   
from (SELECT name,surname,"N-GR"   
FROM students   
ORDER BY surname DESC)   
order by "N-GR"   
  
8   
SELECT name,surname   
from students   
where score>4   
order by score   
  
9   
SELECT name,surname   
FROM students   
ORDER BY score DESC FETCH FIRST 5 ROWS ONLY   
  
10   
SELECT CASE   
WHEN risk between 7 and 11 THEN 'очень высокий'   
WHEN risk between 5 and 8 THEN 'высокий'   
WHEN risk between 3 and 6 THEN 'средний'   
WHEN risk between 1 and 4 THEN 'внизкий'   
WHEN risk <2 THEN 'очень низкий'   
ELSE 'no match'   
END   
FROM hobbies   
  
  
Групповые функции   
1   
SELECT COUNT(distinct concat('name','surname')),"N-GR"   
FROM students   
group by "N-GR"   
  
2   
SELECT AVG(score),"N-GR"   
FROM students   
group by "N-GR"

3

SELECT COUNT(name),surname

FROM students

group by surname

4

SELECT COUNT(concat(name,surname)),to\_char(BDT, 'YYYY')

FROM students

group by to\_char(BDT, 'YYYY')

5

SELECT AVG(score),substr("N-GR",1,1)

FROM students

group by substr("N-GR",1,1)

6

SELECT max(AVG(score))

FROM students

group by "N-GR"

having substr("N-GR",1,1)=2;

7

SELECT AVG(score),"N-GR"

FROM students

group by "N-GR"

having AVG(score)>=3.5

order by AVG(score);

8

SELECT name,risk

FROM hobbies

order by risk desc fetch first 3 rows only;

9

SELECT count(name),max(score),AVG(score),min(score),"N-GR"

FROM students

group by "N-GR"

10

select concat(name,surname),score

from students

where score=

(

SELECT max(score)

FROM students

where "N-GR"=2281

) and "N-GR"=2281

11

select s.N\_GROUP,N\_Z,NAME,SURNAME,SCORE from

(

select max(score) sc,n\_group from students$

group by n\_group

) a,students$ s

where a.n\_group=s.n\_group and sc=score

## Многотабличные запросы

1

SELECT students$.N\_z,

students$.Name,

students$.Surname,

hobbies$.Name

FROM students$,

students\_hobbies$,hobbies$

WHERE students$.N\_z= students\_hobbies$.N\_z

and hobbies$.id= students\_hobbies$.id;

2

SELECT students$.N\_z,

students$.Name,

students$.Surname,

hobbies$.Name,

students\_hobbies$.date\_start

FROM students$,

students\_hobbies$,hobbies$

WHERE students$.N\_z= students\_hobbies$.N\_z

and hobbies$.id= students\_hobbies$.id

and students\_hobbies$.date\_start=(

SELECT min(students\_hobbies$.date\_start)

FROM students\_hobbies$ )

3

select max(name),max(surname),max(N\_z),max(date\_birth)

from(

select s.n\_z,s.nAME,s.surname,S.SCORE,h.risk,s.date\_birth

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and s.score>(select avg(score) from students$)

)

group by N\_Z

having sum(risk)>0.9

ORDER BY sum(risk) DESC;

4

select s.surname,s.nAME,s.n\_z,s.date\_birth,h.name,trunc(MONTHS\_BETWEEN(sh.date\_finish,sh.date\_start),0)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and sh.date\_finish<sysdate

5

select max(s.surname),max(s.nAME),max(s.n\_z),max(s.date\_birth),count(h.name)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and trunc(MONTHS\_BETWEEN(sysdate,s.date\_birth),0)>19\*12 and date\_finish>sysdate

group by s.n\_z

having count(h.name)>0

6

select avg("MAX(S.SCORE)")

from (

select max(s.score),max(s.n\_group)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish>sysdate

group by s.n\_z

)

group by "MAX(S.N\_GROUP)"

7

select h.name,h.risk, trunc(MONTHS\_BETWEEN(sh.date\_finish,sh.date\_start),0),s.n\_z,s.n\_group

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish>sysdate

order by trunc(MONTHS\_BETWEEN(sh.date\_finish,sh.date\_start),0) desc fetch first 1 rows only

8

select h.name,h.id

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and s.score=(select max(s.score) from students$ s)

9

select h.name,h.id

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and s.score=3 and n\_group like '2\_\_\_' and date\_finish>sysdate

10

select a.b n\_k

from

(select count(n) a,substr("MAX(S.N\_GROUP)",1,1) b

from(

select max(s.name),max(s.surname),

CASE

WHEN count(h.name)> 1 THEN count(h.name)

ELSE null

END

n,

max(s.n\_group),max(s.n\_z)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and sh.date\_finish>sysdate

group by s.n\_z

) a

group by substr("MAX(S.N\_GROUP)",1,1)

)a,

(

select count("MAX(S.N\_Z)") a,substr("MAX(S.N\_GROUP)",1,1) b

from(

select max(s.name),max(s.surname),count(h.name),max(s.n\_group),max(s.n\_z)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by s.n\_z

)

group by substr("MAX(S.N\_GROUP)",1,1)

) b

where a.b=b.b and a.a/b.a>0.5

11

select a.n N\_GR

from (

select count(a.score) score,max(a.n\_group) n

from (

select

CASE

WHEN s.score> 4 THEN s.score

ELSE null

END score,

s.n\_group

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z)a

group by a.n\_group

) a,

(

select count(a.score) score,max(a.n\_group) n

from (

select

s.score score,

s.n\_group

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z)a

group by a.n\_group

) b

where b.n=a.n and a.score/b.score>0.6

12

select s.a N\_C,

case when c.b is not null then c.b

else 0 end nmbr

from

(select 0,SUBSTR(N\_GROUP,1,1) a from

students$

group by SUBSTR(N\_GROUP,1,1)

)s,(

select count(DISTINCT h.id) b, substr(n\_group,1,1) a

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish>sysdate

group by substr(n\_group,1,1)

) c

where s.a=c.a (+)

13

select s.n\_z n\_z,surname,name,date\_birth,substr(n\_group,1,1)

from students\_hobbies$ sh,students$ s

where sh.N\_Z(+)=s.N\_Z and id is null and score=5

order by SUBSTR(N\_GROUP,1,1) , DATE\_BIRTH desc

14

create or replace view "STUDENTS\_V1" as

select \*

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish>sysdate and months\_between(sysdate,date\_start)>5\*12;

15

select name,count(n\_z)

from hobbies$ h,students\_hobbies$ sh

where sh.hobby\_id(+)=h.id

group by name

16

select max(h.id) id

from hobbies$ h,students\_hobbies$ sh

where sh.hobby\_id(+)=h.id

group by name

order by count(n\_z) desc fetch first 1 rows only

17

select \*

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

and sh.id=

(

select max(h.id)

from hobbies$ h,students\_hobbies$ sh

where sh.hobby\_id(+)=h.id

group by name

order by count(n\_z) desc fetch first 1 rows only)

18

select id

from hobbies$ h

order by risk desc fetch first 3 rows only

19

select max(s.name),max(surname),min(date\_start)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish>sysdate

group by s.n\_z

order by min(date\_start) fetch first 10 rows only

20

select gr from(

select max(s.name),max(surname),min(date\_start),min(n\_group) gr

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and date\_finish<sysdate

group by s.n\_z

order by min(date\_start) fetch first 10 rows only

)

group by gr

21

create or replace view "STUDENTS\_V2" as

select n\_z,name,surname

from students$

order by score desc;

22

create or replace view "STUDENTS\_V3" as

select p nbr\_pers,nh n\_hobby,b.crs from

(select max(pop) p,crs

from (

select count(s.n\_z) pop,max(h.id) nh,max(substr(s.n\_group,1,1)) crs

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by substr(s.n\_group,1,1), h.id)

group by crs) a,

(select count(s.n\_z) pop,max(h.id) nh,max(substr(s.n\_group,1,1)) crs

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by substr(s.n\_group,1,1), h.id) b

where a.crs=b.crs and p=pop

order by crs

23

create or replace view "STUDENTS\_V4" as

select a."MAX(H.ID)" h\_id from(

select count(s.n\_z),max(h.id),max(risk)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and substr(n\_group,1,1)=2

group by h.id

order by count(s.n\_z) desc,max(risk) desc fetch first 1 rows only) a,

(

select count(s.n\_z),max(h.id),max(risk)

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and substr(n\_group,1,1)=2

group by h.id

order by count(s.n\_z) desc,max(risk) desc) b

where a."COUNT(S.N\_Z)"=b."COUNT(S.N\_Z)" and a."MAX(RISK)"=b."MAX(RISK)"

24

create or replace view "STUDENTS\_V5" as

select a.count cnt\_st,b.count cnt\_st\_having5, a.n\_c from(

select count(s.n\_z) count, substr(n\_group,1,1) n\_c

from students$ s

group by substr(n\_group,1,1)) a,

(

select count(s.n\_z) count, substr(n\_group,1,1) n\_c

from students$ s

where score=5

group by substr(n\_group,1,1)) b

where a.n\_c=b.n\_c

25

create or replace view "STUDENTS\_V6" as

select h.id

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by h.id

order by count(s.n\_z) desc fetch first 1 rows only

26

CREATE OR REPLACE VIEW V7 AS

SELECT N\_z, Surname FROM Students

WITH CHECK OPTION

27

create view v8 as

sELECT lower(substr(name,1,1)) letter,score FROM Students$

UNION

sELECT lower(substr(name,2,1)) letter,score FROM Students$

UNION

sELECT lower(substr(name,3,1)) letter,score FROM Students$

UNION

sELECT lower(substr(name,4,1)) letter,score FROM Students$

UNION

sELECT lower(substr(name,5,1)) letter,score FROM Students$

UNION

sELECT lower(substr(name,6,1)) letter,score FROM Students$

//

//

//

//

select letter,max(score),avg(score),min(score) from v8

group by letter having max(score)>3.6

28

select substr(n\_group,1,1),surname,max(score),min(score) from students$

group by surname, substr(n\_group,1,1)

29

select count(h.name),to\_char(DATE\_BIRTH,'yyyy')

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by to\_char(DATE\_BIRTH,'yyyy')

30

create view v9 as

sELECT lower(substr(s.name,1,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

union

sELECT lower(substr(s.name,2,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

union

sELECT lower(substr(s.name,3,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

union

sELECT lower(substr(s.name,4,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

union

sELECT lower(substr(s.name,5,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

union

sELECT lower(substr(s.name,6,1)) letter,risk

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

//

//

select letter,max(risk),min(risk) from v9

group by letter

order by letter

31

sELECT avg(score),to\_char(DATE\_BIRTH,'mm')

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z and h.name='Футбол'

group by to\_char(DATE\_BIRTH,'mm')

32

sELECT max(s.name) name,max(surname) surname,max(n\_group) n\_group

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by s.n\_z

33

sELECT surname,decode(instr(surname,'ов',1,1),0,'не найдено',instr(surname,'ов',1,1))

from students$ s

34

sELECT surname,rpad(surname,10,'#')

from students$ s

35

sELECT rpad(surname,10,'#'),trim('#' from rpad(surname,10,'#'))

from students$ s

36

sELECT last\_day('01-APR-2018')

from dual

37

select next\_day(sysdate,'saturday') from dual

38

select to\_char(sysdate,'cc'),to\_char(sysdate,'ww'),to\_char(sysdate,'ddd') from dual

39

select max(s.name),max(surname),max(h.name), case when max(date\_finish)<sysdate then 'закончил' else 'занимается' end

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

group by s.n\_z

40

select n\_group,count("2") "2",count("3") "3",count("4") "4",count("5") "5" from

(

select n\_group

,

case when

round(score,0)=2 then round(score,0) else null

end "2",

case when

round(score,0)=3 then round(score,0) else null

end "3",

case when

round(score,0)=4 then round(score,0) else null

end "4",

case when

round(score,0)=5 then round(score,0) else null

end "5"

from hobbies$ h,students\_hobbies$ sh,students$ s

where sh.hobby\_id=h.id and sh.N\_Z=s.N\_Z

)

group by n\_group