Лабораторная 6

--- 7 лаба

--- 1 задание

select

max(AUDITORIUM.AUDITORIUM\_CAPACITY) [max capacity], min(AUDITORIUM.AUDITORIUM\_CAPACITY) [min capacity],

avg(AUDITORIUM.AUDITORIUM\_CAPACITY) [avg capacity], sum(AUDITORIUM.AUDITORIUM\_CAPACITY) [sum capacity], count(\*) [count aud]

from AUDITORIUM;

---2 задание

select AUDITORIUM\_TYPE.AUDITORIUM\_TYPENAME,

max(AUDITORIUM.AUDITORIUM\_CAPACITY) [max capacity], min(AUDITORIUM.AUDITORIUM\_CAPACITY) [min capacity],

avg(AUDITORIUM.AUDITORIUM\_CAPACITY) [avg capacity], sum(AUDITORIUM.AUDITORIUM\_CAPACITY) [sum capacity], count(AUDITORIUM.AUDITORIUM\_TYPE) [count aud]

from AUDITORIUM

inner join AUDITORIUM\_TYPE

on AUDITORIUM.AUDITORIUM\_TYPE = AUDITORIUM\_TYPE.AUDITORIUM\_TYPE

group by AUDITORIUM\_TYPE.AUDITORIUM\_TYPENAME;

--- 3 задание

select \*

from (

select

case

when (PROGRESS.NOTE = 10) then '10'

when (PROGRESS.NOTE IN (8, 9)) then '8-9'

when (PROGRESS.NOTE IN (6, 7)) then '6-7'

when (PROGRESS.NOTE IN (4, 5)) then '4-5'

end [Оценки], count(\*) [Количество]

from PROGRESS

group by

case

when (PROGRESS.NOTE = 10) then '10'

when (PROGRESS.NOTE IN (8, 9)) then '8-9'

when (PROGRESS.NOTE IN (6, 7)) then '6-7'

when (PROGRESS.NOTE IN (4, 5)) then '4-5'

end

) as x

order by

case [Оценки]

when '10' then 1

when '8-9' then 2

when '6-7' then 3

when '4-5' then 4

else 0

end;

--- 4 задание

--- 1 запрос

select FACULTY.FACULTY, GROUPS.PROFESSION, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

group by FACULTY.FACULTY, GROUPS.PROFESSION;

---2 запрос

select FACULTY.FACULTY, GROUPS.PROFESSION, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where PROGRESS.SUBJECT\_T in( 'ОАиП', 'СУБД')

group by FACULTY.FACULTY, GROUPS.PROFESSION;

--- 5 задание

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by rollup(GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T);

--- 6 задание

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by cube(GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T);

--- 7 задание

---union

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ТОВ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T

union

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T;

--- union all

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ТОВ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T

union all

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T;

--- 8 задание

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ТОВ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T

intersect

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T;

--- 9 задание

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ТОВ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T

except

select FACULTY.FACULTY, GROUPS.PROFESSION, PROGRESS.SUBJECT\_T, round(avg(cast(PROGRESS.NOTE AS float(2))), 2) [Средняя оценка]

from FACULTY

inner join GROUPS on FACULTY.FACULTY = GROUPS.FACULTY

inner join STUDENT on GROUPS.IDGROUP = STUDENT.IDGROUP

inner join PROGRESS on STUDENT.IDSTUDENT = PROGRESS.IDSTUDENT

where FACULTY.FACULTY = 'ХТиТ'

group by GROUPS.PROFESSION, FACULTY.FACULTY, PROGRESS.SUBJECT\_T;

--- 10 задание

select PROGRESS.SUBJECT\_T,

(select count(\*)

from PROGRESS

where PROGRESS.SUBJECT\_T = PROGRESS.SUBJECT\_T

and PROGRESS.NOTE in (8, 9)

) [Количество]

from PROGRESS

group by PROGRESS.SUBJECT\_T, PROGRESS.NOTE

having PROGRESS.NOTE in (8, 9)

order by [Количество] desc;