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1: Group Members:
2:
3: Jigeesha Jain B00928112
4:
5: Sanjana Gosavi B00862745
6:
7:
8: SQL> start query1
9: SQL> select dept_code || ' - ' || course# AS course_id , title from
    courses where course# in (select course# from classes where year =
    '2021' and semester = 'Fall');
10:
11: COURSE_ID                                TITLE
12: -----
13: CS - 240                                data structure
14: CS - 532                                database systems
15:
16: SQL> start query2
17: SQL> select firstname from students s, enrollments e
18:    2 where s.sid = e.sid and e.classid in (select classid from classes
    where dept_code = 'CS')
19:    3 intersect
20:    4 select firstname from students s, enrollments e
21:    5 where s.sid = e.sid and e.classid in (select classid from classes
    where dept_code = 'Math');
22:
23: FIRSTNAME
24: -----
25: Anne
26: Terry
27:
28: SQL> start query3
29: SQL> select dept_code, course# from classes where year = '2021';
30:
31: DEPT      COURSE#
32: ----
33: CS          240
34: CS          432
35: CS          532
36: Math        221

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37:
38: SQL> start query4
39: SQL> select sid, lastname, GPA from students where status <>'graduate'
    intersect select sid, lastname, GPA from students where sid in (select
    sid from enrollments where lgrade = 'C');
40:
41: SID  LASTNAME                      GPA
42: ---- -
43: B004 Taylor                        2.7
44:
45: SQL> start query5
46: SQL> select lastname from students where GPA<4;
47:
48: LASTNAME
49: -----
50: Broder
51: Buttler
52: Wang
53: Taylor
54: Smith
55:
56: SQL> start query6
57: SQL> select sid, firstname from students where sid in (select sid from
    enrollments where lgrade = 'A');
58:
59: SID  FIRSTNAME
60: ---- -
61: B003 Tracy
62: B006 Terry
63: B007 Becky
64: B001 Anne
65:
66: SQL> start query7
67: SQL> select dept_code, count(dept_code) as most_frequent from classes
    group by dept_code order by count(dept_code)desc;
68:
69: DEPT MOST_FREQUENT

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70: ---- -

71: CS 4

72: Math 3

73:

74: SQL> start query8

75: SQL> select classid, dept_code, course#, (limit-class_size) as
seats_available from classes where semester = 'Fall' and year = '2021'
and (limit - class_size) >0;

76:

77: CLASS DEPT COURSE# SEATS_AVAILABLE

78: -----

79: c0005 CS 240 1

80: c0006 CS 532 1

81:

82: SQL> start query9

83: SQL> select sid, lastname from students s where (select count(*) from
enrollments where sid=s.sid)>=3;

84:

85: SID LASTNAME

86: ---- -

87: B001 Broder

88:

89: SQL> start query10

90: SQL> select classes.classid, classes.dept_code, classes.course#,
classes.sect#, classes.year, classes.semester, classes.limit,
classes.class_size from classes inner join enrollments on
classes.classid = enrollments.classid inner join students on
enrollments.sid = students.sid where classes.year = '2021' and
classes.semester = 'Fall' and classes.dept_code = 'CS'

91: 2 group by classes.classid, classes.dept_code, classes.course#,
classes.sect#, classes.year, classes.semester, classes.limit,
classes.class_size having count(enrollments.classid)<3;

92:

93: no rows selected

94:

95: SQL> start query11

96: SQL> select sid,firstname from students where sid in (select sid from
enrollments where classid in (select classid from classes where
dept_code ='Math' and course# like '2__'));

97:

98: SID FIRSTNAME

99: ---- -

100: B007 Becky

101:

102: SQL> start query12

103: SQL> select title from courses where course# in (select course# from
classes where classid in (select classid from enrollments where sid =
'B004')) minus select title from courses where course# in (select
course# from classes where classid in (select classid from enrollments
where sid = 'B003'));

104:

105: no rows selected

106:

107: SQL> start query13

108: SQL> select firstname from students where sid in (select sid from
enrollments where classid in (select classid from classes where
dept_code = 'CS' and course# = '532'));

109:

110: FIRSTNAME

111: -----

112: Anne

113: Jack

114: Terry

115:

116: SQL> start query14

117: SQL> select dept_code, course#, semester, year from classes where sect#
> 1;

118:

119: DEPT COURSE# SEMEST YEAR

120: ---- -

121: Math 314 Fall 2020

122:

123: SQL> start query15

124: SQL> select distinct students.sid, students.lastname from students join
enrollments on students.sid = enrollments.sid join grades on
enrollments.lgrade = grades.lgrade where (enrollments.classid,
grades.ngrade) in (select enrollments.classid, max(ngrade) from
enrollments, grades where enrollments.lgrade = grades.lgrade group by
enrollments.classid);

125:

126: SID LASTNAME

127: ---- -

128: B004 Taylor

129: B001 Broder

130: B002 Buttler

131: B003 Wang

132: B007 Lee

133: B006 Zillman

134:

135: 6 rows selected.

136:

137: SQL> start query16

138: SQL> select courses.dept_code, courses.course#, courses.title, lgrade as
final_grade from courses, classes, enrollments where courses.dept_code =
classes.dept_code and courses.course# = classes.course# and
classes.classid = enrollments.classid and enrollments.sid in (select sid
from students where sid = 'B005');

139:

DEPT	COURSE#	TITLE	F
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141: ---- -

CS	532	database systems	B
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143:

144: SQL> start query20

145: SQL> select e.sid, sum(ngrade)/count(classid) as cgpa from enrollments e,
grades g where e.lgrade=g.lgrade group by e.sid order by
sum(ngrade)/count(classid) desc;

146:

SID	CGPA
-----	------

148: ---- -

B003	4
------	---

B007	4
------	---

B006	4
------	---

B001	3.5
------	-----

B002	3
------	---

B005	3
------	---

B004	2.5
------	-----

156:

157: 7 rows selected.

158:

159: SQL> spool off

160: