

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
*****RELATION DUMP END*****
Disk IOS: 3

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
1: 2      -1            100          100        E
*****RELATION DUMP END*****
Disk IOS: 9

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
1: 2      -1            100          100        E
2: 3      100           100          100        E
*****RELATION DUMP END*****
Disk IOS: 17

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
1: 2      -1            100          100        E
2: 3      100           100          100        E
3: 1      99            100          100        A
4: 2      -1            100          100        E
5: 3      100           100          100        E
*****RELATION DUMP END*****
Disk IOS: 47

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
1: (hole)
2: (hole)
3: 1      99            100          100        A
4: (hole)
5: (hole)
*****RELATION DUMP END*****
Disk IOS: 71

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid      homework      project      exam      grade
0: 1      99            100          100        A
1: (hole)
2: (hole)
3: 1      99            100          100        A
4: (hole)

```

```

5: (hole)
6: 4          99          100          100          B
*****RELATION DUMP END*****
Disk IOS: 87

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid          homework          project          exam          grade
0:
1:
2:
3:
4:
5:
6:
*****RELATION DUMP END*****
Disk IOS: 115

```

```

SELECT * FROM course
*****RELATION DUMP BEGIN*****
sid          homework          project          exam          grade
0: 1          99          100          100          A
1: 3          100          100          98          C
2: 3          100          69          64          C
3: 15         100          50          90          E
4: 15         100          99          100          E
5: 17         100          100          100          A
6: 2          100          100          99          B
7: 4          100          100          97          D
8: 5          100          100          66          A
9: 6          100          100          65          B
10: 7         100          50          73          C
11: 8         50          50          62          C
12: 9         50          50          61          D
13: 10        50          70          70          C
14: 11        50          50          59          D
15: 12        0          70          58          C
16: 13        0          50          77          C
17: 14        50          50          56          D
18: 16        0          0          0          E
19: 16        0          0          0          E
20: 16        0          0          0          E
21: 16        0          0          0          E
22: 16        0          0          0          E
23: 16        0          0          0          E
24: 16        0          0          0          E
25: 16        0          0          0          E
26: 16        0          0          0          E
27: 16        0          0          0          E
28: 16        0          0          0          E
29: 16        0          0          0          E
30: 16        0          0          0          E
31: 16        0          0          0          E
32: 16        0          0          0          E
33: 16        0          0          0          E
34: 16        0          0          0          E

```

35: 16	0	0	0	E
36: 16	0	0	0	E
37: 16	0	0	0	E
38: 16	0	0	0	E
39: 16	0	0	0	E
40: 16	0	0	0	E
41: 16	0	0	0	E
42: 16	0	0	0	E
43: 16	0	0	0	E
44: 16	0	0	0	E
45: 16	0	0	0	E
46: 16	0	0	0	E
47: 16	0	0	0	E
48: 16	0	0	0	E
49: 16	0	0	0	E
50: 16	0	0	0	E
51: 16	0	0	0	E
52: 16	0	0	0	E
53: 16	0	0	0	E
54: 16	0	0	0	E
55: 16	0	0	0	E
56: 16	0	0	0	E
57: 16	0	0	0	E
58: 16	0	0	0	E
59: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 354

SELECT sid, grade FROM course

*****RELATION DUMP BEGIN*****

sid	grade
-----	-------

0: 1	A
3	C
3	C
15	E
1: 15	E
17	A
2	B
4	D
2: 5	A
6	B
7	C
8	C
3: 9	D
10	C
11	D
12	C
4: 13	C
14	D
16	E
16	E
5: 16	E
16	E
16	E
16	E
6: 16	E

16	E
16	E
16	E
7: 16	E
16	E
16	E
16	E
8: 16	E
16	E
16	E
16	E
9: 16	E
16	E
16	E
16	E
10: 16	E
16	E
16	E
16	E
11: 16	E
16	E
16	E
16	E
12: 16	E
16	E
16	E
16	E
13: 16	E
16	E
16	E
16	E
14: 16	E
16	E
16	E
17	A

*****RELATION DUMP END*****

Disk IOS: 653

SELECT sid, course.grade FROM course

*****RELATION DUMP BEGIN*****

sid	course.grade
0: 1	A
3	C
3	C
15	E
1: 15	E
17	A
2	B
4	D
2: 5	A
6	B
7	C
8	C
3: 9	D
10	C
11	D

12	C
4: 13	C
14	D
16	E
16	E
5: 16	E
16	E
16	E
16	E
6: 16	E
16	E
16	E
16	E
7: 16	E
16	E
16	E
16	E
8: 16	E
16	E
16	E
16	E
9: 16	E
16	E
16	E
16	E
10: 16	E
16	E
16	E
16	E
11: 16	E
16	E
16	E
16	E
12: 16	E
16	E
16	E
16	E
13: 16	E
16	E
16	E
16	E
14: 16	E
16	E
16	E
17	A

*****RELATION DUMP END*****

Disk IOS: 952

```

SELECT DISTINCT grade FROM course
*****RELATION DUMP BEGIN*****
grade
0: A
B
C
D
E

```

*****RELATION DUMP END*****

Disk IOS: 1284

SELECT DISTINCT * FROM course

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 2	100	100	99	B
2: 3	100	69	64	C
3: 3	100	100	98	C
4: 4	100	100	97	D
5: 5	100	100	66	A
6: 6	100	100	65	B
7: 7	100	50	73	C
8: 8	50	50	62	C
9: 9	50	50	61	D
10: 10	50	70	70	C
11: 11	50	50	59	D
12: 12	0	70	58	C
13: 13	0	50	77	C
14: 14	50	50	56	D
15: 15	100	50	90	E
16: 15	100	99	100	E
17: 16	0	0	0	E
18: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 1621

SELECT * FROM course ORDER BY exam

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 16	0	0	0	E
1: 16	0	0	0	E
2: 16	0	0	0	E
3: 16	0	0	0	E
4: 16	0	0	0	E
5: 16	0	0	0	E
6: 16	0	0	0	E
7: 16	0	0	0	E
8: 16	0	0	0	E
9: 16	0	0	0	E
10: 16	0	0	0	E
11: 16	0	0	0	E
12: 16	0	0	0	E
13: 16	0	0	0	E
14: 16	0	0	0	E
15: 16	0	0	0	E
16: 16	0	0	0	E
17: 16	0	0	0	E
18: 16	0	0	0	E
19: 16	0	0	0	E
20: 16	0	0	0	E
21: 16	0	0	0	E
22: 16	0	0	0	E
23: 16	0	0	0	E
24: 16	0	0	0	E

25: 16	0	0	0	E
26: 16	0	0	0	E
27: 16	0	0	0	E
28: 16	0	0	0	E
29: 16	0	0	0	E
30: 16	0	0	0	E
31: 16	0	0	0	E
32: 16	0	0	0	E
33: 16	0	0	0	E
34: 16	0	0	0	E
35: 16	0	0	0	E
36: 16	0	0	0	E
37: 16	0	0	0	E
38: 16	0	0	0	E
39: 16	0	0	0	E
40: 16	0	0	0	E
41: 16	0	0	0	E
42: 14	50	50	56	D
43: 12	0	70	58	C
44: 11	50	50	59	D
45: 9	50	50	61	D
46: 8	50	50	62	C
47: 3	100	69	64	C
48: 6	100	100	65	B
49: 5	100	100	66	A
50: 10	50	70	70	C
51: 7	100	50	73	C
52: 13	0	50	77	C
53: 15	100	50	90	E
54: 4	100	100	97	D
55: 3	100	100	98	C
56: 2	100	100	99	B
57: 17	100	100	100	A
58: 1	99	100	100	A
59: 17	100	100	100	A
60: 15	100	99	100	E

*****RELATION DUMP END*****

Disk IOS: 2042

SELECT * FROM course WHERE exam = 100

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 15	100	99	100	E
2: 17	100	100	100	A
3: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 2229

SELECT * FROM course WHERE grade = "A"

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 17	100	100	100	A
2: 5	100	100	66	A
3: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 2416

SELECT * FROM course WHERE exam = 100 AND project = 100

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 17	100	100	100	A
2: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 2601

SELECT * FROM course WHERE exam = 100 OR exam = 99

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 15	100	99	100	E
2: 17	100	100	100	A
3: 2	100	100	99	B
4: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 2790

SELECT * FROM course WHERE NOT exam = 0

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 16	0	0	0	E
1: 16	0	0	0	E
2: 16	0	0	0	E
3: 16	0	0	0	E
4: 16	0	0	0	E
5: 16	0	0	0	E
6: 16	0	0	0	E
7: 16	0	0	0	E
8: 16	0	0	0	E
9: 16	0	0	0	E
10: 16	0	0	0	E
11: 16	0	0	0	E
12: 16	0	0	0	E
13: 16	0	0	0	E
14: 16	0	0	0	E
15: 16	0	0	0	E
16: 16	0	0	0	E
17: 16	0	0	0	E
18: 16	0	0	0	E
19: 16	0	0	0	E
20: 16	0	0	0	E
21: 16	0	0	0	E
22: 16	0	0	0	E
23: 16	0	0	0	E
24: 16	0	0	0	E
25: 16	0	0	0	E
26: 16	0	0	0	E
27: 16	0	0	0	E
28: 16	0	0	0	E
29: 16	0	0	0	E

30: 16	0	0	0	E
31: 16	0	0	0	E
32: 16	0	0	0	E
33: 16	0	0	0	E
34: 16	0	0	0	E
35: 16	0	0	0	E
36: 16	0	0	0	E
37: 16	0	0	0	E
38: 16	0	0	0	E
39: 16	0	0	0	E
40: 16	0	0	0	E

*****RELATION DUMP END*****

Disk IOS: 3051

SELECT * FROM course WHERE exam > 70

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 3	100	100	98	C
2: 15	100	50	90	E
3: 15	100	99	100	E
4: 17	100	100	100	A
5: 2	100	100	99	B
6: 4	100	100	97	D
7: 7	100	50	73	C
8: 13	0	50	77	C
9: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 3250

SELECT * FROM course WHERE exam = 100 OR homework = 100 AND project = 100

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 3	100	100	98	C
2: 15	100	99	100	E
3: 17	100	100	100	A
4: 2	100	100	99	B
5: 4	100	100	97	D
6: 5	100	100	66	A
7: 6	100	100	65	B
8: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 3447

SELECT * FROM course WHERE [exam = 100 OR homework = 100] AND project = 100

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 1	99	100	100	A
1: 3	100	100	98	C
2: 17	100	100	100	A
3: 2	100	100	99	B
4: 4	100	100	97	D
5: 5	100	100	66	A
6: 6	100	100	65	B
7: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 3642

SELECT * FROM course WHERE exam + homework = 200

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 15	100	99	100	E
1: 17	100	100	100	A
2: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 3827

SELECT * FROM course WHERE (exam * 30 + homework * 20 + project * 50) / 100 = 100

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
0: 17	100	100	100	A
1: 17	100	100	100	A

*****RELATION DUMP END*****

Disk IOS: 4010

SELECT * FROM course WHERE grade = "C" AND [exam > 70 OR project > 70] AND NOT (exam * 30 + homework * 20 + project * 50) / 100 < 60

*****RELATION DUMP BEGIN*****

sid	homework	project	exam	grade
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*****RELATION DUMP END*****

Disk IOS: 4190

SELECT * FROM course, course2

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid	
course.exam	course.grade			
course2.exam	course2.grade			
0: 1	99	100	100	A
1	100	A		
1: 1	99	100	100	A
16	25	E		
2: 1	99	100	100	A
17	0	A		
3: 3	100	100	98	C
1	100	A		
4: 3	100	100	98	C
16	25	E		
5: 3	100	100	98	C
17	0	A		
6: 3	100	69	64	C
1	100	A		
7: 3	100	69	64	C
16	25	E		
8: 3	100	69	64	C
17	0	A		
9: 15	100	50	90	E
1	100	A		
10: 15	100	50	90	E
16	25	E		
11: 15	100	50	90	E

17	0	A		
12: 15	100	99	100	E
1	100	A		
13: 15	100	99	100	E
16	25	E		
14: 15	100	99	100	E
17	0	A		
15: 17	100	100	100	A
1	100	A		
16: 17	100	100	100	A
16	25	E		
17: 17	100	100	100	A
17	0	A		
18: 2	100	100	99	B
1	100	A		
19: 2	100	100	99	B
16	25	E		
20: 2	100	100	99	B
17	0	A		
21: 4	100	100	97	D
1	100	A		
22: 4	100	100	97	D
16	25	E		
23: 4	100	100	97	D
17	0	A		
24: 5	100	100	66	A
1	100	A		
25: 5	100	100	66	A
16	25	E		
26: 5	100	100	66	A
17	0	A		
27: 6	100	100	65	B
1	100	A		
28: 6	100	100	65	B
16	25	E		
29: 6	100	100	65	B
17	0	A		
30: 7	100	50	73	C
1	100	A		
31: 7	100	50	73	C
16	25	E		
32: 7	100	50	73	C
17	0	A		
33: 8	50	50	62	C
1	100	A		
34: 8	50	50	62	C
16	25	E		
35: 8	50	50	62	C
17	0	A		
36: 9	50	50	61	D
1	100	A		
37: 9	50	50	61	D
16	25	E		
38: 9	50	50	61	D
17	0	A		
39: 10	50	70	70	C

1	100	A		
40: 10	50	70	70	C
16	25	E		
41: 10	50	70	70	C
17	0	A		
42: 11	50	50	59	D
1	100	A		
43: 11	50	50	59	D
16	25	E		
44: 11	50	50	59	D
17	0	A		
45: 12	0	70	58	C
1	100	A		
46: 12	0	70	58	C
16	25	E		
47: 12	0	70	58	C
17	0	A		
48: 13	0	50	77	C
1	100	A		
49: 13	0	50	77	C
16	25	E		
50: 13	0	50	77	C
17	0	A		
51: 14	50	50	56	D
1	100	A		
52: 14	50	50	56	D
16	25	E		
53: 14	50	50	56	D
17	0	A		
54: 16	0	0	0	E
1	100	A		
55: 16	0	0	0	E
16	25	E		
56: 16	0	0	0	E
17	0	A		
57: 16	0	0	0	E
1	100	A		
58: 16	0	0	0	E
16	25	E		
59: 16	0	0	0	E
17	0	A		
60: 16	0	0	0	E
1	100	A		
61: 16	0	0	0	E
16	25	E		
62: 16	0	0	0	E
17	0	A		
63: 16	0	0	0	E
1	100	A		
64: 16	0	0	0	E
16	25	E		
65: 16	0	0	0	E
17	0	A		
66: 16	0	0	0	E
1	100	A		
67: 16	0	0	0	E

16	25	E		
68: 16	0	O	0	E
17	0	A		
69: 16	0	O	0	E
1	100	A		
70: 16	0	O	0	E
16	25	E		
71: 16	0	O	0	E
17	0	A		
72: 16	0	O	0	E
1	100	A		
73: 16	0	O	0	E
16	25	E		
74: 16	0	O	0	E
17	0	A		
75: 16	0	O	0	E
1	100	A		
76: 16	0	O	0	E
16	25	E		
77: 16	0	O	0	E
17	0	A		
78: 16	0	O	0	E
1	100	A		
79: 16	0	O	0	E
16	25	E		
80: 16	0	O	0	E
17	0	A		
81: 16	0	O	0	E
1	100	A		
82: 16	0	O	0	E
16	25	E		
83: 16	0	O	0	E
17	0	A		
84: 16	0	O	0	E
1	100	A		
85: 16	0	O	0	E
16	25	E		
86: 16	0	O	0	E
17	0	A		
87: 16	0	O	0	E
1	100	A		
88: 16	0	O	0	E
16	25	E		
89: 16	0	O	0	E
17	0	A		
90: 16	0	O	0	E
1	100	A		
91: 16	0	O	0	E
16	25	E		
92: 16	0	O	0	E
17	0	A		
93: 16	0	O	0	E
1	100	A		
94: 16	0	O	0	E
16	25	E		
95: 16	0	O	0	E

17	0	A		
96: 16	0	O	0	E
1	100	A		
97: 16	0	O	0	E
16	25	E		
98: 16	0	O	0	E
17	0	A		
99: 16	0	O	0	E
1	100	A		
100: 16	0	O	0	E
16	25	E		
101: 16	0	O	0	E
17	0	A		
102: 16	0	O	0	E
1	100	A		
103: 16	0	O	0	E
16	25	E		
104: 16	0	O	0	E
17	0	A		
105: 16	0	O	0	E
1	100	A		
106: 16	0	O	0	E
16	25	E		
107: 16	0	O	0	E
17	0	A		
108: 16	0	O	0	E
1	100	A		
109: 16	0	O	0	E
16	25	E		
110: 16	0	O	0	E
17	0	A		
111: 16	0	O	0	E
1	100	A		
112: 16	0	O	0	E
16	25	E		
113: 16	0	O	0	E
17	0	A		
114: 16	0	O	0	E
1	100	A		
115: 16	0	O	0	E
16	25	E		
116: 16	0	O	0	E
17	0	A		
117: 16	0	O	0	E
1	100	A		
118: 16	0	O	0	E
16	25	E		
119: 16	0	O	0	E
17	0	A		
120: 16	0	O	0	E
1	100	A		
121: 16	0	O	0	E
16	25	E		
122: 16	0	O	0	E
17	0	A		
123: 16	0	O	0	E

1	100	A		
124: 16	0	O	0	E
16	25	E		
125: 16	0	O	0	E
17	0	A		
126: 16	0	O	0	E
1	100	A		
127: 16	0	O	0	E
16	25	E		
128: 16	0	O	0	E
17	0	A		
129: 16	0	O	0	E
1	100	A		
130: 16	0	O	0	E
16	25	E		
131: 16	0	O	0	E
17	0	A		
132: 16	0	O	0	E
1	100	A		
133: 16	0	O	0	E
16	25	E		
134: 16	0	O	0	E
17	0	A		
135: 16	0	O	0	E
1	100	A		
136: 16	0	O	0	E
16	25	E		
137: 16	0	O	0	E
17	0	A		
138: 16	0	O	0	E
1	100	A		
139: 16	0	O	0	E
16	25	E		
140: 16	0	O	0	E
17	0	A		
141: 16	0	O	0	E
1	100	A		
142: 16	0	O	0	E
16	25	E		
143: 16	0	O	0	E
17	0	A		
144: 16	0	O	0	E
1	100	A		
145: 16	0	O	0	E
16	25	E		
146: 16	0	O	0	E
17	0	A		
147: 16	0	O	0	E
1	100	A		
148: 16	0	O	0	E
16	25	E		
149: 16	0	O	0	E
17	0	A		
150: 16	0	O	0	E
1	100	A		
151: 16	0	O	0	E

16	25	E		
152: 16	0	O	0	E
17	0	A		
153: 16	0	O	0	E
1	100	A		
154: 16	0	O	0	E
16	25	E		
155: 16	0	O	0	E
17	0	A		
156: 16	0	O	0	E
1	100	A		
157: 16	0	O	0	E
16	25	E		
158: 16	0	O	0	E
17	0	A		
159: 16	0	O	0	E
1	100	A		
160: 16	0	O	0	E
16	25	E		
161: 16	0	O	0	E
17	0	A		
162: 16	0	O	0	E
1	100	A		
163: 16	0	O	0	E
16	25	E		
164: 16	0	O	0	E
17	0	A		
165: 16	0	O	0	E
1	100	A		
166: 16	0	O	0	E
16	25	E		
167: 16	0	O	0	E
17	0	A		
168: 16	0	O	0	E
1	100	A		
169: 16	0	O	0	E
16	25	E		
170: 16	0	O	0	E
17	0	A		
171: 16	0	O	0	E
1	100	A		
172: 16	0	O	0	E
16	25	E		
173: 16	0	O	0	E
17	0	A		
174: 16	0	O	0	E
1	100	A		
175: 16	0	O	0	E
16	25	E		
176: 16	0	O	0	E
17	0	A		
177: 17	100	100	100	A
1	100	A		
178: 17	100	100	100	A
16	25	E		
179: 17	100	100	100	A


```

17          0          A
*****RELATION DUMP END*****
Disk IOS: 4734

```

```

SELECT course.sid, course.grade, course2.grade FROM course, course2 WHERE
course.sid = course2.sid

```

```

*****RELATION DUMP BEGIN*****

```

course.sid	course.grade	course2.grade
0: 1	A	A
2	B	B
1: 3	C	C
3	C	C
2: 4	D	D
5	A	A
3: 6	B	B
16	E	E
4: 16	E	E
16	E	E
5: 16	E	E
16	E	E
6: 16	E	E
16	E	E
7: 16	E	E
16	E	E
8: 16	E	E
16	E	E
9: 16	E	E
16	E	E
10: 16	E	E
16	E	E
11: 16	E	E
16	E	E
12: 16	E	E
16	E	E
13: 16	E	E
16	E	E
14: 16	E	E
16	E	E
15: 16	E	E
16	E	E
16: 16	E	E
16	E	E
17: 16	E	E
16	E	E
18: 16	E	E
16	E	E
19: 16	E	E
16	E	E
20: 16	E	E
16	E	E
21: 16	E	E
16	E	E
22: 16	E	E
16	E	E
23: 16	E	E
16	E	E

```

24: 17          A          A
17            A          A
*****RELATION DUMP END*****
Disk IOS: 5234

```

```

SELECT DISTINCT course.grade, course2.grade FROM course, course2 WHERE
course.sid = course2.sid
*****RELATION DUMP BEGIN*****
course.grade      course2.grade
0: A              A
B                  B
C                  C
D                  D
1: E              E
*****RELATION DUMP END*****
Disk IOS: 5740

```

```

SELECT * FROM course, course2 WHERE course.sid = course2.sid ORDER BY
course.exam
*****RELATION DUMP BEGIN*****
course.sid      course.homework      course.project
course.exam     course.grade      course2.sid
course2.exam    course2.grade
0: 16           0              0              0              E
16             25              E
1: 16           0              0              0              E
16             25              E
2: 16           0              0              0              E
16             25              E
3: 16           0              0              0              E
16             25              E
4: 16           0              0              0              E
16             25              E
5: 16           0              0              0              E
16             25              E
6: 16           0              0              0              E
16             25              E
7: 16           0              0              0              E
16             25              E
8: 16           0              0              0              E
16             25              E
9: 16           0              0              0              E
16             25              E
10: 16          0              0              0              E
16             25              E
11: 16          0              0              0              E
16             25              E
12: 16          0              0              0              E
16             25              E
13: 16          0              0              0              E
16             25              E
14: 16          0              0              0              E
16             25              E
15: 16          0              0              0              E
16             25              E
16: 16          0              0              0              E

```

16	25	E		
17: 16	0	0	0	E
16	25	E		
18: 16	0	0	0	E
16	25	E		
19: 16	0	0	0	E
16	25	E		
20: 16	0	0	0	E
16	25	E		
21: 16	0	0	0	E
16	25	E		
22: 16	0	0	0	E
16	25	E		
23: 16	0	0	0	E
16	25	E		
24: 16	0	0	0	E
16	25	E		
25: 16	0	0	0	E
16	25	E		
26: 16	0	0	0	E
16	25	E		
27: 16	0	0	0	E
16	25	E		
28: 16	0	0	0	E
16	25	E		
29: 16	0	0	0	E
16	25	E		
30: 16	0	0	0	E
16	25	E		
31: 16	0	0	0	E
16	25	E		
32: 16	0	0	0	E
16	25	E		
33: 16	0	0	0	E
16	25	E		
34: 16	0	0	0	E
16	25	E		
35: 16	0	0	0	E
16	25	E		
36: 16	0	0	0	E
16	25	E		
37: 16	0	0	0	E
16	25	E		
38: 16	0	0	0	E
16	25	E		
39: 16	0	0	0	E
16	25	E		
40: 16	0	0	0	E
16	25	E		
41: 16	0	0	0	E
16	25	E		
42: 3	100	69	64	C
3	98	C		
43: 6	100	100	65	B
6	65	B		
44: 5	100	100	66	A

5	66	A		
45: 4	100	100	97	D
4	97	D		
46: 3	100	100	98	C
3	98	C		
47: 2	100	100	99	B
2	99	B		
48: 17	100	100	100	A
17	0	A		
49: 1	99	100	100	A
1	100	A		
50: 17	100	100	100	A
17	0	A		

*****RELATION DUMP END*****
Disk IOS: 6449

SELECT * FROM course, course2 WHERE course.sid = course2.sid AND course.exam = 100 AND course2.exam = 100

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid
course.exam	course.grade		
course2.exam	course2.grade		
0: 1	99	100	100
1	100	A	

*****RELATION DUMP END*****
Disk IOS: 6809

SELECT * FROM course, course2 WHERE course.sid = course2.sid AND [course.exam = 100 OR course2.exam = 100]

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid
course.exam	course.grade		
course2.exam	course2.grade		
0: 1	99	100	100
1	100	A	
1: 17	100	100	100
17	0	A	
2: 17	100	100	100
17	0	A	

*****RELATION DUMP END*****
Disk IOS: 7173

SELECT * FROM course, course2 WHERE course.sid = course2.sid AND course.exam > course2.exam

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid
course.exam	course.grade		
course2.exam	course2.grade		
0: 17	100	100	100
17	0	A	
1: 17	100	100	100
17	0	A	

*****RELATION DUMP END*****
Disk IOS: 7535

SELECT * FROM course, course2 WHERE course.sid = course2.sid AND course.exam >

course2.exam AND course.homework = 100

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid
course.exam	course.grade	course2.sid	
course2.exam	course2.grade		
0: 17	100	100	A
17	0	A	
1: 17	100	100	A
17	0	A	

*****RELATION DUMP END*****

Disk IOS: 7897

SELECT * FROM course, course2 WHERE course.sid = course2.sid AND [course.exam > course2.exam OR course.homework = 100]

*****RELATION DUMP BEGIN*****

course.sid	course.homework	course.project	course2.sid
course.exam	course.grade	course2.sid	
course2.exam	course2.grade		
0: 2	100	100	B
2	99	B	
1: 3	100	69	C
3	98	C	
2: 3	100	100	C
3	98	C	
3: 4	100	100	D
4	97	D	
4: 5	100	100	A
5	66	A	
5: 6	100	100	B
6	65	B	
6: 17	100	100	A
17	0	A	
7: 17	100	100	A
17	0	A	

*****RELATION DUMP END*****

Disk IOS: 8271

SELECT DISTINCT course.grade, course2.grade FROM course, course2 WHERE course.sid = course2.sid AND [course.exam > course2.exam OR course.grade = "A" AND course2.grade = "A"] ORDER BY course.exam

*****RELATION DUMP BEGIN*****

course.grade	course2.grade
0: A	A

*****RELATION DUMP END*****

Disk IOS: 8643

SELECT * FROM r, s, t WHERE r.a=t.a AND r.b=s.b AND s.c=t.c

*****RELATION DUMP BEGIN*****

r.a	r.b	s.b	s.c	t.a
t.c				

*****RELATION DUMP END*****

Disk IOS: 9018

SELECT * FROM t1, t2, t3, t4, t5, t6

*****RELATION DUMP BEGIN*****

t1.c	t2.c	t3.c	t4.c	t5.c
------	------	------	------	------

t6.c
*****RELATION DUMP END*****
Disk IOS: 9054