Results

CREATE TABLE course (sid INT, homework INT, project INT, exam INT, grade STR20) INSERT INTO course (sid, homework, project, exam, grade) VALUES (1, 99, 100, 100, "A") INSERT INTO course (sid, homework, project, exam, grade) VALUES (3, 100, 100, 98, "C") INSERT INTO course (sid, homework, project, exam, grade) VALUES (3, 100, 69, 64, "C") INSERT INTO course (sid, homework, project, exam, grade) VALUES (6, 100, 100, 65, "B") SELECT * FROM course

```
Angelas-MacBook-Air:Project2 Skye$ ./a.out <te
#Disk I/0s = 0
Now the relation contains:
*****RELATION DUMP BEGIN*****
sid
       homework
                       project exam
                                       grade
0: 1
       99
               100
                       100
                               A
*****RELATION DUMP END*****
#Disk I/Os = 1
3
Now the relation contains:
******RELATION DUMP BEGIN*****
sid
       homework
                       project exam
                                       grade
             100
0: 1
       99
                       100
                               A
       100
               100
                       98
                               C
1: 3
*****RELATION DUMP END*****
#Disk I/0s = 2
Now the relation contains:
*****RELATION DUMP BEGIN****
sid
       homework
                       project exam
                                       grade
               100
                       100
0: 1
       99
                               A
                       98
                               C
1: 3
       100
               100
2: 3
       100
               69
                       64
                               C
*****RELATION DUMP END*****
#Disk I/Os = 2
Now the relation contains:
*****RELATION DUMP BEGIN****
                       project exam
sid
       homework
                                       grade
0: 1
       99
               100
                       100
1: 3
       100
               100
                       98
                               C
2: 3
       100
               69
                       64
                               C
3: 6
       100
               100
                       65
                               B
*****RELATION DUMP END*****
\#Disk I/0s = 2
6
Attributes selected:
sid
       homework
                       project exam
                                       grade
3
       100
                               C
\#Disk\ I/Os = 4
Angelas-MacBook-Air: Project2 Skye$
```

```
SELECT * FROM course ORDER BY exam
```

```
Now the relation contains:
******RELATION DUMP BEGIN*****
sid
        homework
                        project exam
                                       grade
0: 1
        99
                100
                        100
                                A
                        98
                                C
1: 3
        100
                100
                                C
2: 3
                69
                        64
        100
        100
                        65
                                В
3: 6
                100
*****RELATION DUMP END*****
#Disk I/Os = 2
```

SELECT * FROM course WHERE grade = "C" AND exam > 70 OR project > 70 AND (exam * 30 + 100 + 100 = 1

```
6
Attributes selected:
sid homework project exam grade
3 100 100 98 C

#Disk I/Os = 4
Angelas-MacBook-Air:Project2 Skye$
```

```
INSERT INTO course2 (sid, exam, grade) VALUES (1, 100, "A")
INSERT INTO course2 (sid, exam, grade) VALUES (16, 25, "E")
INSERT INTO course2 (sid, exam, grade) VALUES (17, 0, "A")
SELECT course.sid, course.grade, course2.grade FROM course, course2 WHERE
course.sid = course2.sid
#Disk I/0s = 0
Now the relation contains:
*****RELATION DUMP BEGIN*****
       exam grade
        100
******RELATION DUMP END*****
#Disk I/Os = 1
Now the relation contains:
******RELATION DUMP BEGIN*****
sid
        exam
                grade
0: 1
        100
                A
        25
16
                E
*****RELATION DUMP END*****
\#Disk I/0s = 2
Now the relation contains:
******RELATION DUMP BEGIN****
        exam
                grade
0: 1
        100
        25
                E
1: 17
*****RELATION DUMP END*****
#Disk I/0s = 2
                A
```

CREATE TABLE course2 (sid INT, exam INT, grade STR20)

#Disk I/0s = 6

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

```
12
1 99 100 100 A 1 100 A

#Disk I/Os = 6

DROP TABLE course
DROP TABLE course2

17
Dropped: course
#Disk I/Os = 0
```

18 Dropped: course2 #Disk I/Os = 0

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For this next case, we created table course, inserted 60 tuples into the relation, and executed a SELECT * query. We calculated a total of 60 Disk I/Os which matches the performance of our interpreter.

	0			Projec
15	100	50	90	E
15	100	99	100	E
17	100	100	100	A
2	100	100	99	В
4	100	100	97	D
5	100	100	66	Α
6	100	100	65	В
7	100	50	73	c
8	50	50	62	c
9	50	50	61	D
10	50	70	70	C
11	50	50	59	D
12	0	70	58	c
13	0	50	77	C
14	50	50	56	
				D
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
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16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
16	0	0	0	E
17	100	100	100	Α

#Disk I/Os = 60
Angelas-MacBook-Air:Project2 Skye\$ >