



**The University of
Chicago**
Department of
Computer Science

CMSC 23500 – Introduction to Database Systems
Spring Quarter 2012
Lab Project – Part II

Group
ID:

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Grader:

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Step 1: Database Machine

Description	Possible points	Points
DBM scaffolding (data structures, auxiliary functions, etc.)	5	5
Cursors scaffolding (data structures, auxiliary functions, not including functions to move cursors)	5	5
OpenRead/OpenWrite/Close	2	2
Rewind/Next/Prev	5	5
Seek/SeekGt/SeekGe	3	3
Column/Key	2	2
Integer/String/Null	2	2
ResultRow	2	2
MakeRecord	5	5
Insert	2	2
Eq/Ne/Lt/Le/Gt/Ge	2	2
IdxGt/IdxGe/IdxLt/IdxLe	5	5
IdxKey	2	2
IdxInsert	2	2
CreateTable/CreateIndex	2	2
SCopy	2	2
Halt	2	1
Style penalty, assessed if code is incomprehensible	-3	0
TOTAL	50	49



Step 2: Schema Loading

<i>Description</i>	<i>Possible points</i>	<i>Points</i>
Schema scaffolding (data structures, auxiliary functions, etc.)	5	5
Loading schema into memory	10	10
Style penalty, assessed if code is incomprehensible	-3	0
TOTAL	15	15

(From direct API tests, seems to be working. Not sure about `tables[i+1]`, rather than `tables[i]`, in `chidb_open` (around line 165).)

Step 3: Simple Code Generation

<i>Description</i>	<i>Possible points</i>	<i>Points</i>
SELECT (without WHERE)	10	10
WHERE clause	5	1
INSERT	5	1
Style penalty, assessed if code is incomprehensible	-3	0
TOTAL	20	12

(Shell is broken; had to code tests by hand. Did so by hacking your "tests-gen.c"

Relational operators on numbers inverted: try `SELECT dept FROM courses WHERE dept>50;`

Rel. ops. on text broken: try `SELECT name FROM courses WHERE name="Operating Systems";`

INSERT broken as far as I can tell.)



Step 4: API Functions

<i>Description</i>	<i>Possible points</i>	<i>Points</i>
chidb_prepare	6	6
chidb_step	4	4
chidb_finalize	1	1
Column access functions	4	4
Style penalty, assessed if code is incomprehensible	-3	0
TOTAL	15	15

Furthermore, three point penalty for broken shell. Please fix.

TOTAL	100	88
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