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CS283
Assignment 1

Mini Database

Documentation

Database format:

- _Each database is saved as .txt file
- _Each value is separate by a , ex: field1,field2,
- _First line is the field and the rest after is data.

Test main functionality

SELECT

```
n3-15-232:a1 ductran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o min  
ibase && "/Users/ductran/Desktop/a1/"minibase  
Enter command:  
SELECT  
Enter table name:  
test  
Enter select field:  
*  
Enter where field:  
field1  
Enter where value:  
data1  
field1 field2 field3  
data1 data10 data3  
n3-15-232:a1 ductran$
```

```
Enter command:  
SELECT  
Enter table name:  
test  
Enter select field:  
field1,field2  
Enter where field:  
field2  
Enter where value:  
data5  
field1 field2  
data8 data5
```

DELETE

Before

```
1 field1,field2,field3,
2 data1,data10,data3,
3 data8,data5,data6,
4 data7,data8,data9,
5 data20,data40,(null),
6 (null),(null),(null),
7 (null),(null),(null),
8
```

After

```
Enter command:
DELETE
Enter table name:
test
Enter where field:
field2
Enter where value:
data40
field1 field2 field3
data1 data10 data3
data8 data5 data6
data7 data8 data9
(null) (null) (null)
(null) (null) (null)
```

UPDATE

Before

```
1 field1,field2,field3,
2 data1,data10,data3,
3 data8,data5,data6,
4 data7,data8,data9,
5 (null),(null),(null),
6 (null),(null),(null),
7
```

After

```
n3-15-232:a1 ductran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o minibase && "/Users/ductran/Desktop/a1/"minibase
Enter command:
UPDATE
Enter table name:
test
Enter set field:
field1
Enter set value:
data99
Enter where field:
field2
Enter where value:
data10
field1 field2 field3
data99 data10 data3
data8 data5 data6
data7 data8 data9
(null) (null) (null)
(null) (null) (null)
```

INSERT VALUE

Before

```
1 field1,field2,field3,
2 data99,data10,data3,
3 data8,data5,data6,
4 data7,data8,data9,
5 (null),(null),(null),
6 (null),(null),(null),
7
```

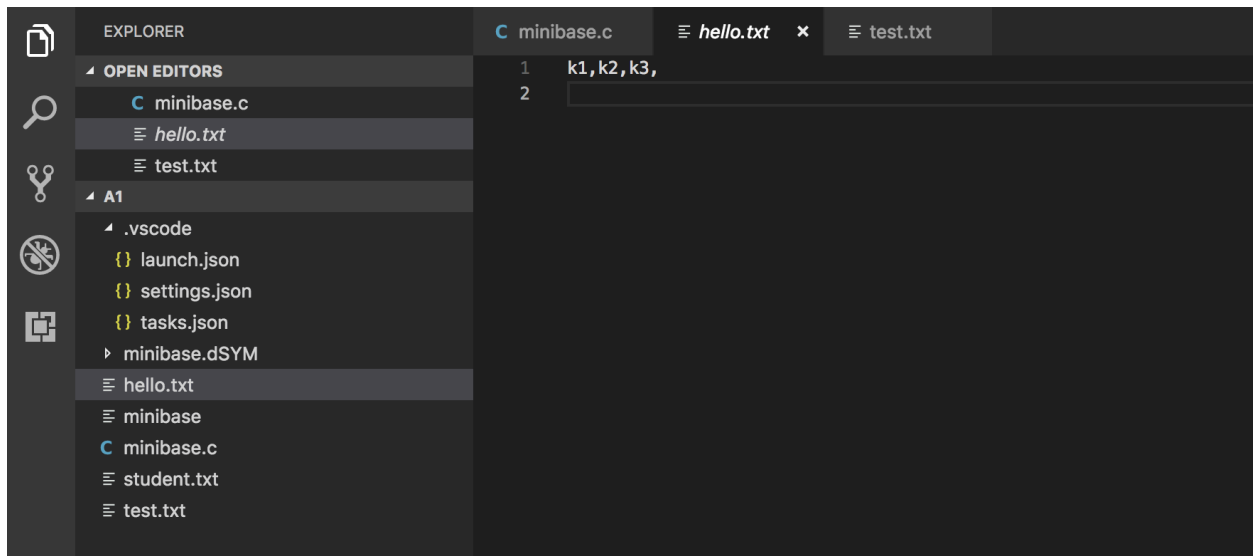
After

```
n3-15-232:a1 ductran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o minibase && "/Users/ductran/Desktop/a1/"minibase
Enter command:
INSERT
Enter table name:
test
Enter field:
field1
Enter value:
data88
field1 field2 field3
data99 data10 data3
data8 data5 data6
data7 data8 data9
data88 (null) (null)
(null) (null) (null)
n3-15-232:a1 ductran$
```

```
n3-15-232:a1 ducran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o minibase && "/Users/ductran/Desktop/a1/"minibase
Enter command:
INSERT
Enter table name:
test
Enter field:
field2
Enter value:
data55
field1 field2 field3
data99 data10 data3
data8 data5 data6
data7 data8 data9
data88 data55 (null)
(null) (null) (null)
(null) (null) (null)
```

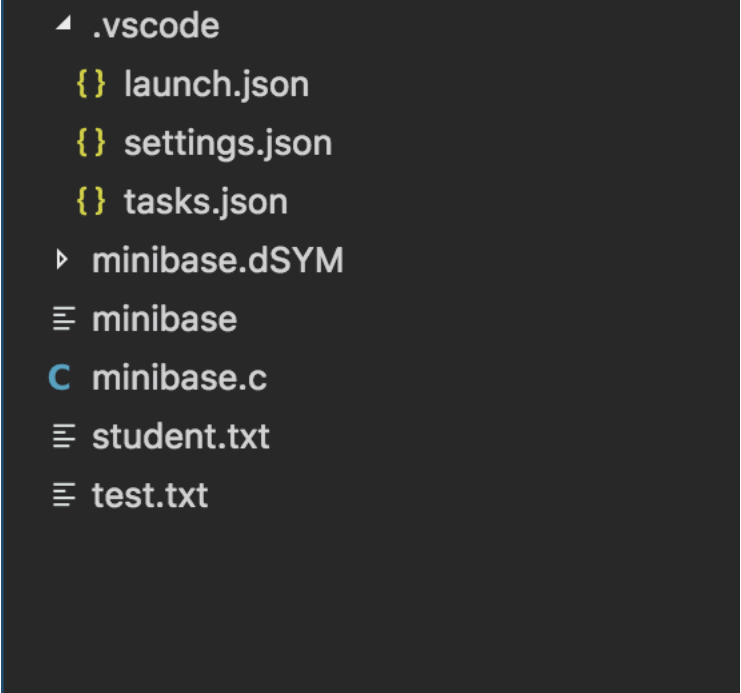
CREATE AND DROP TABLE

```
n3-15-232:a1 ducran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o minibase && "/Users/ductran/Desktop/a1/"minibase
Enter command:
CREATE
Enter table name:
hello
Enter fields:
k1,k2,k3,
n3-15-232:a1 ducran$
```



```
n3-15-232:a1 ducran$ cd "/Users/ductran/Desktop/a1/" && gcc minibase.c -o minibase && "/Users/ductran/Desktop/a1/"minibase
Enter command:
DROP
Enter table name:
hello
```

Database is deleted



A screenshot of a file explorer window with a dark background. The file list is as follows:

- ▲ .vscode
 - { } launch.json
 - { } settings.json
 - { } tasks.json
- minibase.dSYM
- ≡ minibase
- C minibase.c
- ≡ student.txt
- ≡ test.txt