

# MiniSQL Document

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# Contents

<b>1</b>	<b>MiniSQL CLI</b>	<b>3</b>
<b>2</b>	<b>MiniSQL API</b>	<b>4</b>
<b>3</b>	<b>MiniSQL Structure</b>	<b>5</b>
3.1	Buffer Manager . . . . .	5
3.1.1	Data Struct . . . . .	5
3.1.2	Public Functions . . . . .	5
3.2	Record Manager . . . . .	6
3.2.1	Data Struct . . . . .	6
3.2.2	Public Functions . . . . .	6
3.3	Catalog Manager . . . . .	6
3.3.1	Public Functions . . . . .	6

## **Chapter 1**

# **MiniSQL CLI**

## **Chapter 2**

# **MiniSQL API**

## Chapter 3

# MiniSQL Structure

### 3.1 Buffer Manager

#### 3.1.1 Data Struct

```
1 struct Buffer
2 {
3     u8 win[BLOCKSIZE]; // The window for client to visit
4     u32 winptr; // The block cached in win
5     u8 dirty;
6     u8 _cache[CACHESIZE][BLOCKSIZE];
7     u32 _cacheptr[CACHESIZE];
8     u8 _dirty[CACHESIZE];
9 };
10 typedef struct Buffer Buffer;
```

#### 3.1.2 Public Functions

**Func :**

**void buffer\_init(Buffer \*, const char \*);**

**void sync\_window(Buffer \*);**

**void move\_window(Buffer \*,u32);**

**void extend(...)**

**Description :**

Initialize the buffer with filename.

Synchronize the buffer window: Write back to cache if it's dirty.

Move the buffer window to specified block( Synchronize First).

Extend the file.

## 3.2 Record Manager

### 3.2.1 Data Struct

```
1 struct item
2 {
3     dataType type;
4     Data data;
5 };
6 typedef struct item item;
7
8 struct record
9 {
10     item i[MAXCOLUMN];
11     Bool valid;
12 };
13 typedef struct record record;
```

### 3.2.2 Public Functions

Func :	Description :
MiniList *Recordmanager_getRecord(table *tb);	Return all records in table.
Insert	
Select	
Delete	
...	

## 3.3 Catalog Manager

### 3.3.1 Public Functions

Func :	Description :
createTable	
connectTable	
dropTable	

**RegIndex**

**RMIndex**