

customer(cno,cname,mobile)

to add a column in customer table

alter table customer

add email varchar

to delete column from customer table

alter table customer

drop email varchar

## Data types collection

### 1. list

- duplicate values are allowed
- it is represented as []
- it is ordered collection, hence indexing is possible.
- It is mutable

add in the list at the end	update student set hobbies=hobbies+['trekking'] where sid=1;
add in the list at the begining	update student set hobbies=['trekking']+hobbies where sid=1;
delete from the list	update student set hobbies-['trekking'] where sid=1;
overwrite the list 1 <sup>st</sup> index position with some value	update student set hobbies[1]='trekking' where sid=1;

### 2. set

- it is a collection of unique values
- it is represented using {}
- It is unordered, and hence no indexing is possible
- It is mutable

add value in the set	update customer  set brands=brands+{'a','b'}  where cno=1;
delete value from the set	update customer  set brands=brands-{'a','b'};  where cno=1;

delete all values from the set	update customer set brands={} where cno=1;
assign or overwrite value in the set	update customer set brands={'puma','bata'} where cno=1;

### 3. map

- it allows to store key-value pair
- keys should be unique
- data is stored in {}
- values can be retrieved by using keys.

add value in the map	update student set marks=marks +{'java':98} where sid=1;
delete all values from the map	update student set marks={} where sid=1;
delete some key-value pair	update student set marks=marks -{'java','python'} where sid=1;
assign or overwrite value in the map	update student set marks['perl']=100 where sid=1;

### 4. tuple

- duplicates are allowed
  - it is ordered collection, so indexing is possible
  - tuples are immutable
  - it uses ()
  - these are fixed length data
- alter table student add degree tuple<text,text,int>;

```
cqlsh:iacsd0324> update student set degree=('Mtech','PU',89)
where sid=1;
```

```
create table test1( id int, name varchar,data list<tuple<int,text>>,data2 map<text,list<text>>)
```

-----create custom data types

```
create type address(street text,zipcode text,city text)
```

```

create table supplier(sid,sname,saddr address)

create table customer1(sid,sname,saddr list<FROZEN<address>>)

insert into supplier(sid,sname,saddr)
values(11,'xxx',{‘street’:‘baner’,‘zipcode’:‘11111’,city:‘Pune’})

---add new field in the type

alter type address add bldgnm text;

---to rename the field in the type

alter type address rename bldgnm to bname

```

In Cassandra we can execute batch operation

```

begin batch

insert into customer(cno,cname,brands,mobile,billamt) values(111,'xx',{‘a’,‘b’},‘2222’,44444)

insert into customer(cno,cname,brands,mobile,billamt) values(112,'yy',{‘x’,‘y’},‘2222’,66666)

delete mobile from customer where cno=1

apply batch

```

```

create index idxname on customer(billamt)

-----to insert data in json format

insert into customer JSON '

{"cno":12,"cname":"dfsd","brands":["a","b"],"mobile":"34567",

"billamt":4567}';

```