

## CASSANDRA – LAB 1

Q1. Create a keyspace named hospital with class SimpleStrategy and replication factor 1 in Cassandra database and do the following.

```
cqlsh> create keyspace hospital with replication ={'class':'SimpleStrategy','replication_factor':1};
```

- a) Create a columnfamily named patient with columns ptid, ptname, address(map), phone(list).

```
pital> create table patient(ptid int primary key,ptname text,address map<text,text>,phone list<bigint>);
```

- b) Create another columnfamily named doctor with columns docid, docname, dept, qualification(set).

```
cqlsh:hospital> create table doctor(docid int primary key,docname text,dept text,qualification set<text>);
```

```
cqlsh:hospital> select * from doctor;

docid | dept | docname | qualification
-----+-----+-----+-----
```

- c) Insert some rows into patient and doctor tables as a batch.

```
pital> begin batch
... insert into patient(ptid,ptname,address,phone) values (1,'rama',{'street':'sb road','city':'pune'},[123456]);
... insert into patient(ptid,ptname,address,phone) values (2,'ruhi',{'street':'koradi road','city':'nagpur'},[3256236]);
... apply batch;
```

```
cqlsh:hospital> begin batch
... insert into doctor(docid,docname,dept,qualification) values (1,'abhinav','gynac',{'mbbs','md'});
... insert into doctor(docid,docname,dept,qualification) values (2,'abha','ortho',{'mbbs','md'});
... apply batch;
cqlsh:hospital>
```

```
pital> select * from patient;

address | phone | ptname
-----+-----+-----
{'city': 'pune', 'street': 'sb road'} | [123456] | rama
{'city': 'nagpur', 'street': 'koradi road'} | [3256236] | ruhi
```

- d) Change one phone no: with a new one of a particular patient.

```
pital> update patient set phone=[515476] where ptid=1;
pital> select * from patient;
```

ddress	phone	ptname
{'city': 'pune', 'street': 'sb road'}	[515476]	rama
'city': 'nagpur', 'street': 'koradi road'	[3256236]	ruhi

- e) Remove a phone no: from the list of a particular patient.

```
pital> update patient set phone=phone-[515476] where ptid=1;
pital> select * from patient;
```

ddress	phone	ptname
{'city': 'pune', 'street': 'sb road'}	null	rama
'city': 'nagpur', 'street': 'koradi road'	[3256236]	ruhi

- f) Update the house no: of a particular patient in the map address.

```
pital> update patient set address['house']='123 house' where ptid=2;
pital> select * from patient;
```

ddress	phone	ptname
{'city': 'pune', 'street': 'sb road'}	null	rama
'city': 'nagpur', 'house': '123 house', 'street': 'koradi road'	[3256236]	ruhi

- g) Add a new qualification to the set of a particular doctor.

```
pital> update doctor set qualification=qualification+{'ms'} where docid=1;
pital> select * from doctor;
```

dept	docname	qualification
gynac	abhinav	{'mbbs', 'md', 'ms'}
ortho	abha	{'mbbs', 'md'}

- h) Display docname and dept of all doctors.

```
pital> select docname,dept from doctor;
```

dept
gynac
ortho

- i) Add a new column named email in doctor table.

```
cqlsh:hospital> alter table doctor add email text;
cqlsh:hospital> select * from doctor;
```

docid	dept	docname	email	qualification
1	gynac	abhinav	null	{'mbbs', 'md', 'ms'}
2	ortho	abha	null	{'mbbs', 'md'}

- j) Display all the keyspaces.

```
cqlsh:hospital> desc keyspaces;
```

hospital	system_auth	system	system_distributed	system_traces	system_schema
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