Cassandra Retrieving Sorting

Creating Keyspace

```
🌄 Cassandra CQL Shell
cqlsh> CREATE KEYSPACE cycling
    ... WITH replication = {'class':'SimpleStrategy', 'replication_factor' : 3};
cqlsh> create table cycling.rank_by_year_and_name(
    ... race_year int,
    ... race_name text,
    ... cyclist_name text,
    ... rank int,
     ... PRIMARY KEY ((race_year, race_name), rank));
 calsh>
cqlsh>
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Tour of Japan
- Stage 4 - Minami > Shinshu', 'Benjamin PRADES',1);
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Tour of Japan
- Stage 4 - Minami > Shinshu', 'Adam PHELAN',2);
cqish> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Tour of Japan
- Stage 4 - Minami > Shinshu', 'Thomas LEBAS',3);
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Giro d''Itali
a - Stage 11 - Forli > Imola', 'Ilnur ZAKARIN',1);
calsh>
calsh>
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Giro d''Itali
a - Stage 11 - Forli > Imola', 'Carlos BETANCUE',2);
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of B
eijing', 'Phillipe GILBERT',1);
cqlsh>
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of B
eijing', 'Daniel MARTIN',2);
cqlsh>
cqlsh> insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of B
eijing', 'Johan Esteban CHAVES',3);
cqlsh>
```

Displaying Table

```
cqlsh> select * from cycling.rank_by_year_and_name;
race_year | race_name
                                                         | rank | cyclist_name
                                    4th Tour of Beijing |
                                                              1 |
                                                                      Phillipe GILBERT
      2014
                                    4th Tour of Beijing
     2014
                                                              2 |
                                                                        Daniel MARTIN
                                    4th Tour of Beijing
     2014
                                                              3
                                                                  Johan Esteban CHAVES
                                                                         Ilnur ZAKARIN
              Giro d'Italia - Stage 11 - Forli > Imola |
     2015
              Giro d'Italia - Stage 11 - Forli > Imola
                                                              2
                                                                       Carlos BETANCUE
     2015
            Tour of Japan - Stage 4 - Minami > Shinshu
     2015
                                                                       Benjamin PRADES
             Tour of Japan - Stage 4 - Minami > Shinshu
     2015
                                                              2
                                                                           Adam PHELAN
     2015
             Tour of Japan - Stage 4 - Minami > Shinshu |
                                                              3 I
                                                                          Thomas LEBAS
(8 rows)
cqlsh>
```

Querying

```
cqlsh>
cqlsh> select * from cycling.rank_by_year_and_name LIMIT 3;
 race_year | race_name
                                             | rank | cyclist_name
       2014 | 4th Tour of Beijing | 1 | Phillipe GILBERT
2014 | 4th Tour of Beijing | 2 | Daniel MARTIN
2014 | 4th Tour of Beijing | 3 | Johan Esteban CHAVES
                                                              Phillipe GILBERT
(3 rows)
cglsh>
cqlsh>
cqlsh> SELECT race year, race name as race info from cycling.rank by year and name;
 race_year | race_info
                                                 4th Tour of Beijing
        2014
                                                4th Tour of Beijing
        2014
                                                4th Tour of Beijing
        2014
        2015
                   Giro d'Italia - Stage 11 - Forli > Imola
                    Giro d'Italia - Stage 11 - Forli > Imola
        2015
       2015 | Tour of Japan - Stage 4 - Minami > Shinshu
2015 | Tour of Japan - Stage 4 - Minami > Shinshu
2015 | Tour of Japan - Stage 4 - Minami > Shinshu
(8 rows)
cqlsh>
```

CODES

CREATE KEYSPACE cycling

```
WITH replication = {'class':'SimpleStrategy', 'replication_factor' : 3};
```

```
create table cycling.rank_by_year_and_name(
race_year int,
race_name text,
cyclist_name text,
rank int,
PRIMARY KEY ((race_year, race_name), rank));
```

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Tour of Japan - Stage 4 - Minami > Shinshu', 'Adam PHELAN',2);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Tour of Japan - Stage 4 - Minami > Shinshu', 'Thomas LEBAS',3);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Giro d''Italia - Stage 11 - Forli > Imola', 'Ilnur ZAKARIN',1);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2015, 'Giro d''Italia - Stage 11 - Forli > Imola', 'Carlos BETANCUE',2);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of Beijing', 'Phillipe GILBERT',1);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of Beijing', 'Daniel MARTIN',2);

insert into cycling.rank_by_year_and_name (race_year, race_name, cyclist_name, rank) values (2014, '4th Tour of Beijing', 'Johan Esteban CHAVES',3);

select * from cycling.rank_by_year_and_name;

select * from cycling.rank_by_year_and_name LIMIT 3;

SELECT race_year, race_name as race_info from cycling.rank_by_year_and_name;