----------------Gathering stats to know the execution time for query------------

exec dbms_stats.gather_table_stats('ADMIN','APARTMENT_UTILITY');--gather stats

explain plan for SELECT APARTMENT.APARTMENT_ID, APARTMENT_UTILITY.UTILITY_ID, UTILITY.UTILITY_NAME FROM APARTMENT

JOIN APARTMENT_UTILITY ON APARTMENT.APARTMENT_ID=APARTMENT_UTILITY.APARTMENT_ID

JOIN UTILITY ON APARTMENT_UTILITY.UTILITY_ID=UTILITY.UTILITY_ID

WHERE APARTMENT_UTILITY.IS_INCLUDED_IN_RENT= 'Yes' order by utility.utility_id,apartment.apartment_id;-------explains stats

select * from table(dbms_Xplan.display);---displays execution time-----------0.346 secs

```
Plan hash value: 3935555268

---------------------------------------------------------------------------------------------
| Id  | Operation                       | Name             | Rows  | Bytes | Cost (%CPU)| Time     |
---------------------------------------------------------------------------------------------
|   0 | SELECT STATEMENT                |                  |    44 |  1100 |     7  (29)| 00:00:01 |
|   1 |  SORT ORDER BY                  |                  |    44 |  1100 |     7  (29)| 00:00:01 |
|   2 |   MERGE JOIN                    |                  |    44 |  1100 |     6  (17)| 00:00:01 |
|   3 |    TABLE ACCESS BY INDEX ROWID| UTILITY            |     9 |   126 |     2   (0)| 00:00:01 |
|   4 |     INDEX FULL SCAN             | SYS_C0028163     |     9 |       |     1   (0)| 00:00:01 |
|*  5 |    SORT JOIN                    |                  |    44 |   484 |     4  (25)| 00:00:01 |
|*  6 |     TABLE ACCESS STORAGE FULL | APARTMENT UTILITY  |    44 |   484 |     3   (0)| 00:00:01 |
---------------------------------------------------------------------------------------------

Predicate Information (identified by operation id):
---------------------------------------------------
```

-------------Creating index on Included_rent column-----------------------------

CREATE INDEX INDEX_APARTMENT_UTILITY

ON APARTMENT_UTILITY(IS_INCLUDED_IN_RENT);

-----------After index creation-----------------

exec dbms_stats.gather_table_stats('ADMIN','APARTMENT_UTILITY');--gather stats

explain plan for SELECT APARTMENT.APARTMENT_ID, APARTMENT_UTILITY.UTILITY_ID, UTILITY.UTILITY_NAME FROM APARTMENT

JOIN APARTMENT_UTILITY ON APARTMENT.APARTMENT_ID=APARTMENT_UTILITY.APARTMENT_ID

JOIN UTILITY ON APARTMENT_UTILITY.UTILITY_ID=UTILITY.UTILITY_ID

WHERE APARTMENT_UTILITY.IS_INCLUDED_IN_RENT= 'Yes' order by utility.utility_id,apartment.apartment_id;-------explains stats

select * from table(dbms_Xplan.display);---displays execution time-----------0.098 secs

0.105 secs

```
  PLAN_TABLE_OUTPUT
1 Plan hash value: 3057030135
2
3 -----------------------------------------------------------------------------------------
4 | Id  | Operation                             | Name                  | Rows  | Bytes | Cost (%CPU)| Time     |
5 -----------------------------------------------------------------------------------------
6 |   0 | SELECT STATEMENT                      |                       |    44 |  1100 |     6  (34)| 00:00:01 |
7 |   1 |  SORT ORDER BY                        |                       |    44 |  1100 |     6  (34)| 00:00:01 |
8 |   2 |   MERGE JOIN                          |                       |    44 |  1100 |     5  (20)| 00:00:01 |
9 |   3 |    TABLE ACCESS BY INDEX ROWID        | UTILITY               |     9 |   126 |     2   (0)| 00:00:01 |
10 |   4 |     INDEX FULL SCAN                   | SYS C0028163          |     9 |       |     1   (0)| 00:00:01 |
11 |*  5 |    SORT JOIN                          |                       |    44 |   484 |     3  (34)| 00:00:01 |
12 |   6 |     TABLE ACCESS BY INDEX ROWID BATCHED| APARTMENT UTILITY    |    44 |   484 |     2   (0)| 00:00:01 |
13 |*  7 |      INDEX RANGE SCAN                 | INDEX APARTMENT UTILITY |  44 |       |     1   (0)| 00:00:01 |
14 -----------------------------------------------------------------------------------------
15
16 Predicate Information (identified by operation id):
17 -----------------------------------------------------------------------------------------
```

npiler - Log