SQL:

- SQL stands for structured query language its owned by oracle
- The version of the oracle is 23.1.1
- This language is basically used to communicate with the database.

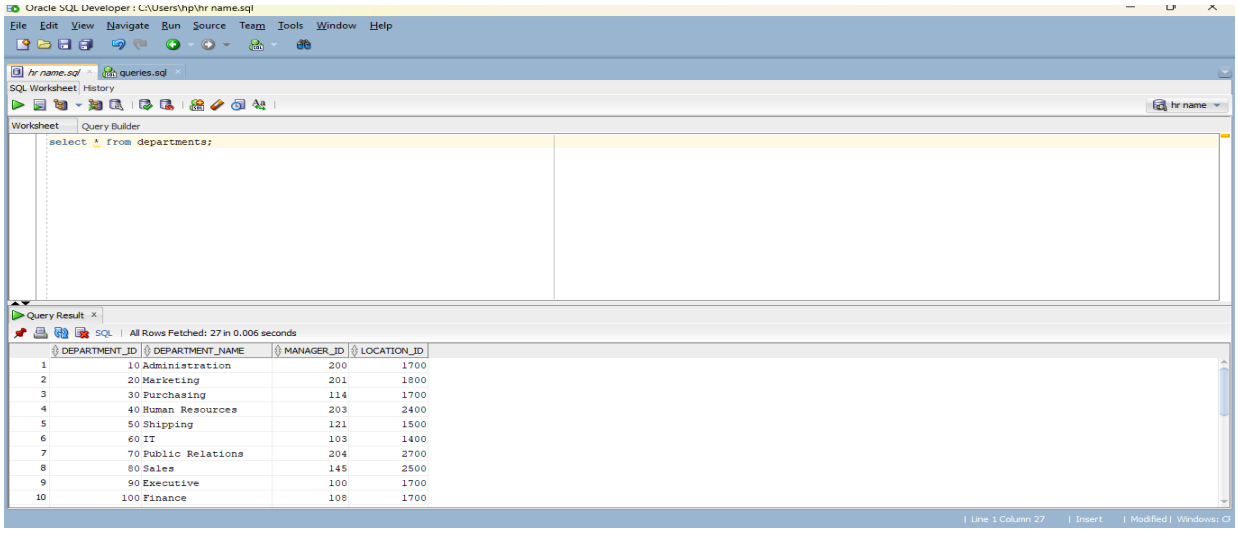
DRL or DQL:

- DRL stands for data retrieval language or data query language
- This command is used to retrieve data from the database

SELECT statements:

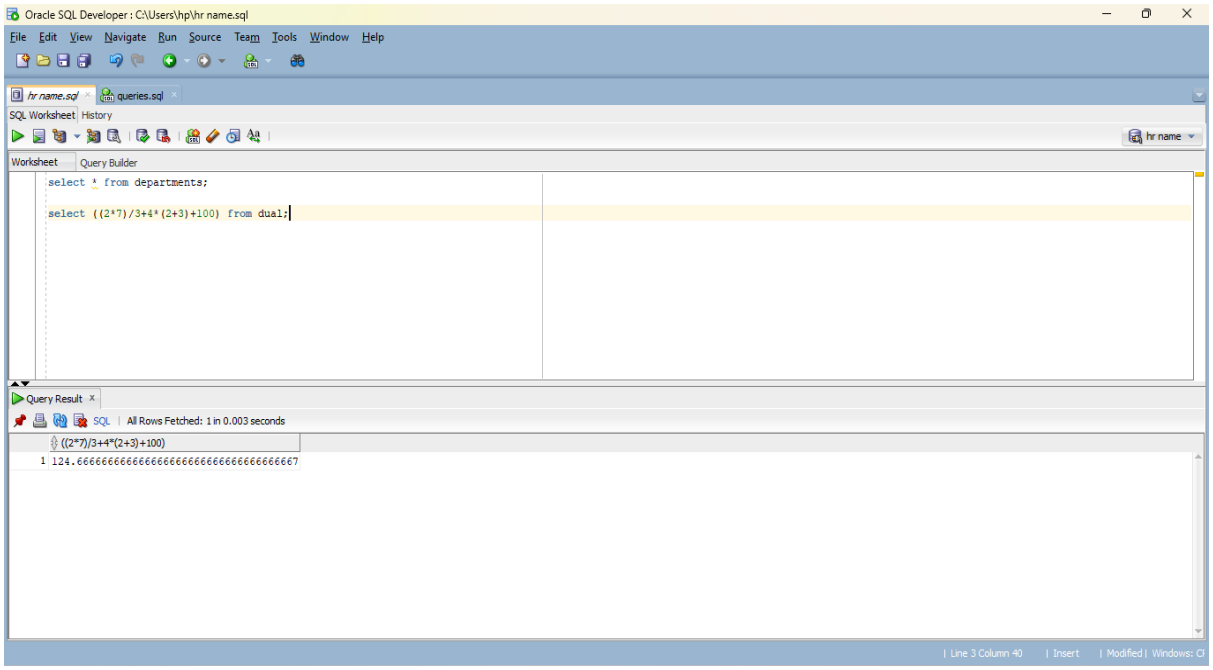
- Select statement is used to retrieve all the information from the database
- Syntax: select * from table_name;
- * - refers to retrieve all information from table

Select * from departments -> select and from is a keyword and departments is my tablename



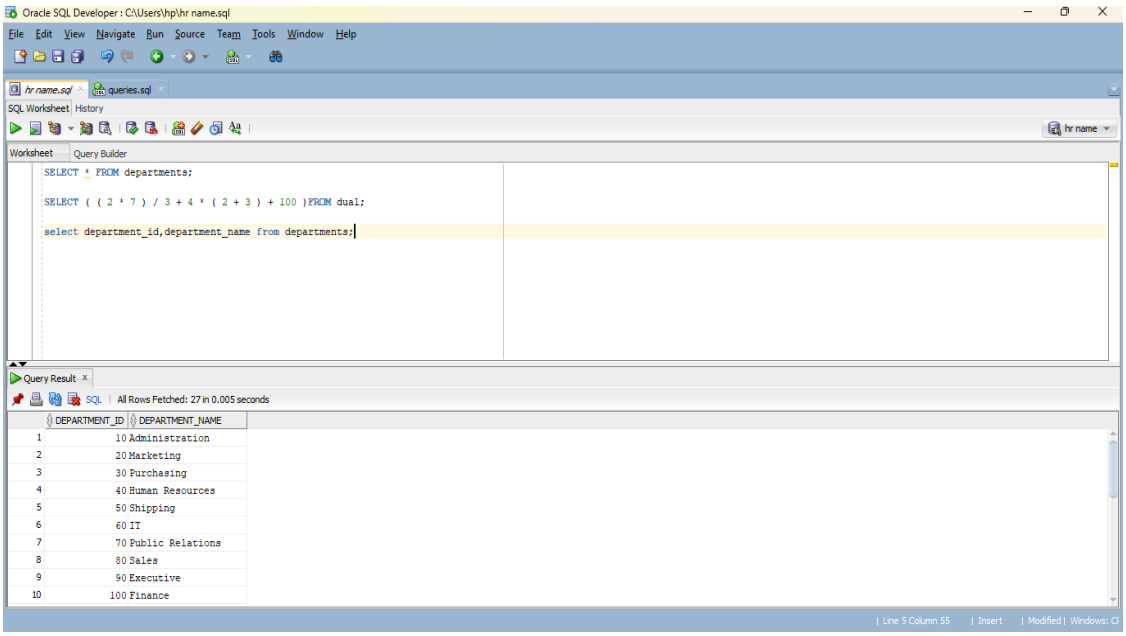
Dual:

- Syntax: select expression from dual;
- Dual is a command which is used to get instance output or immediate output
- Dual has only one rows and one columns.
- It is used for arithmetic operations.



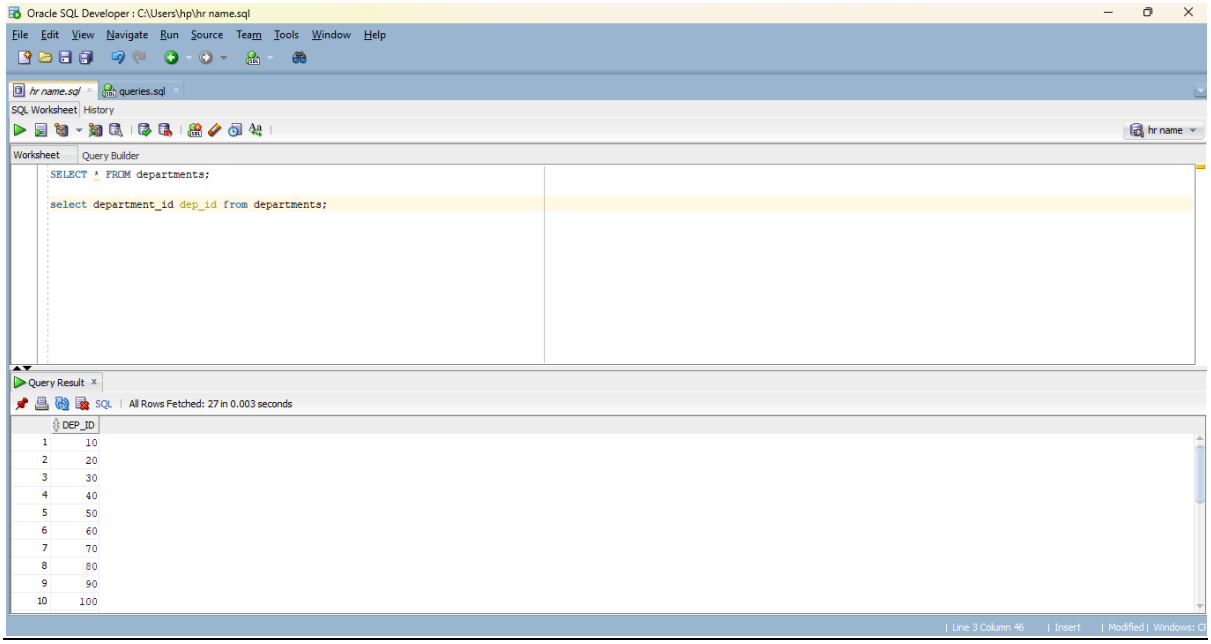
Column level restriction:

- Column level restriction displays us the required column and restricts other column
- Syntax: select column_name1,column_name2,.. from table_name;
- When we want a specific column from the table then it is called column level restriction



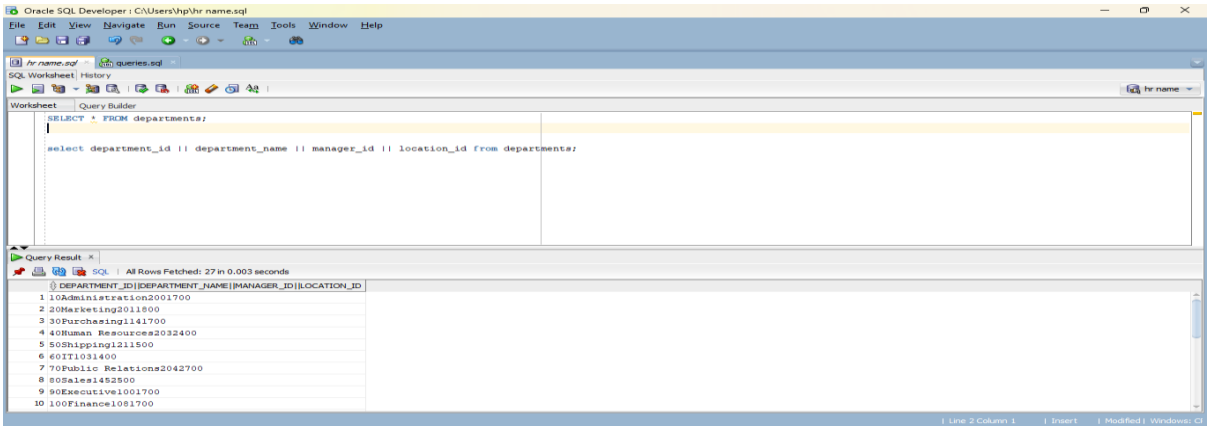
Alias name:

- Alias name is used to change the column name at the runtime
- As – as is a keyword for alias name
- Even if we not mention ‘as’ then we can only give extra space and alias name
- Syntax: select column_name as my_own_name from table_name.
- Syntax : select column_name   my_own_name from table_name.



Pipeline operator (||):

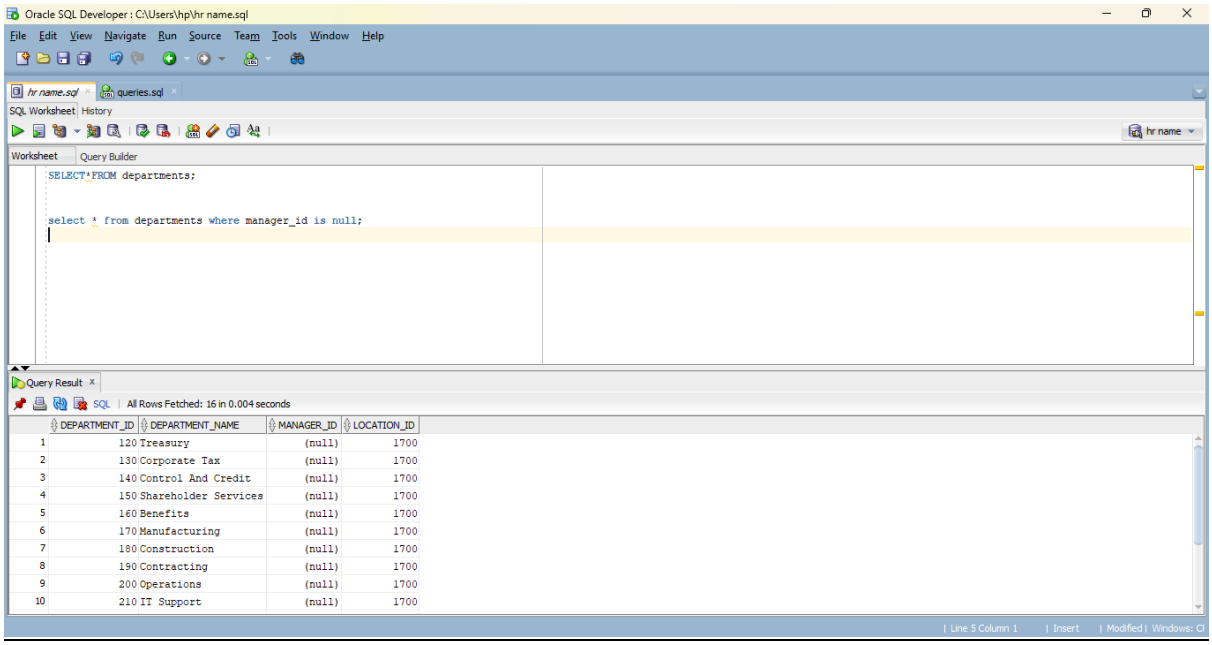
- The pipeline operator is used to combine multiple columns into a single columns.

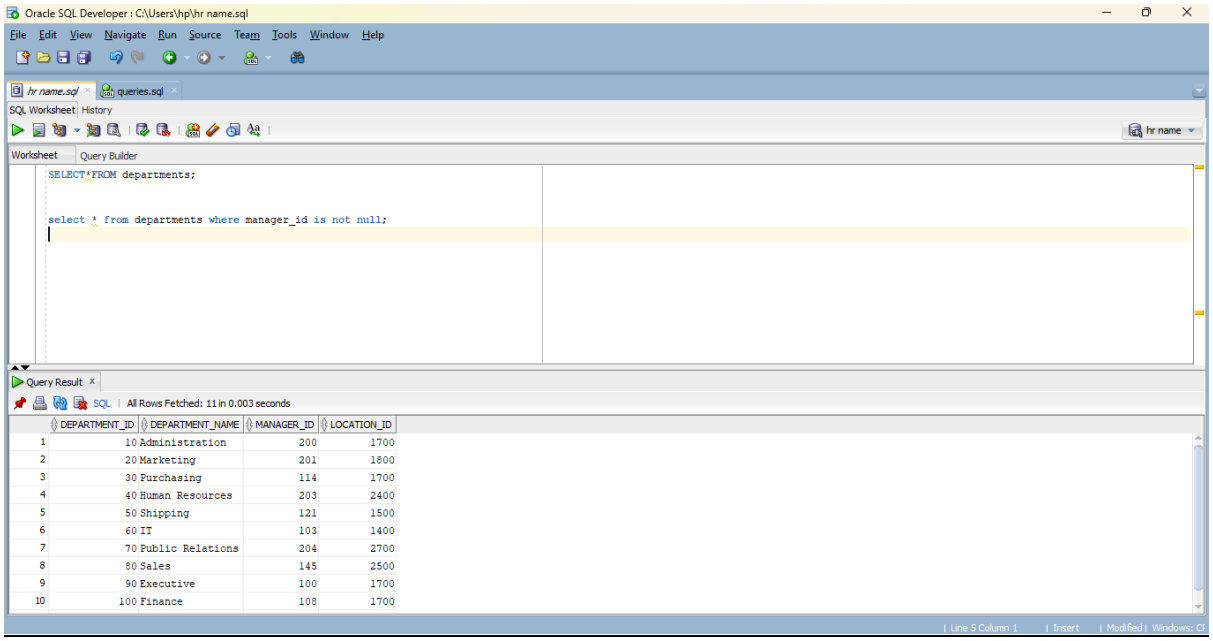


Null:

- Null is not equal to null
- Null is not equal to zero

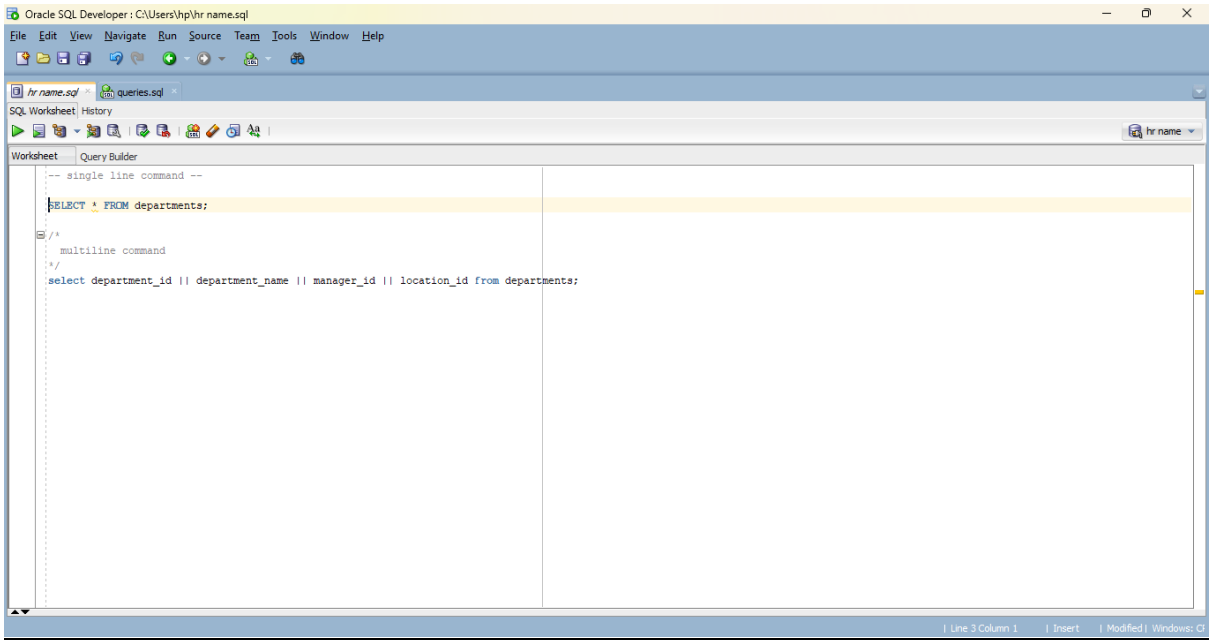
- Is – it is a keyword we can only use this keyword in Null





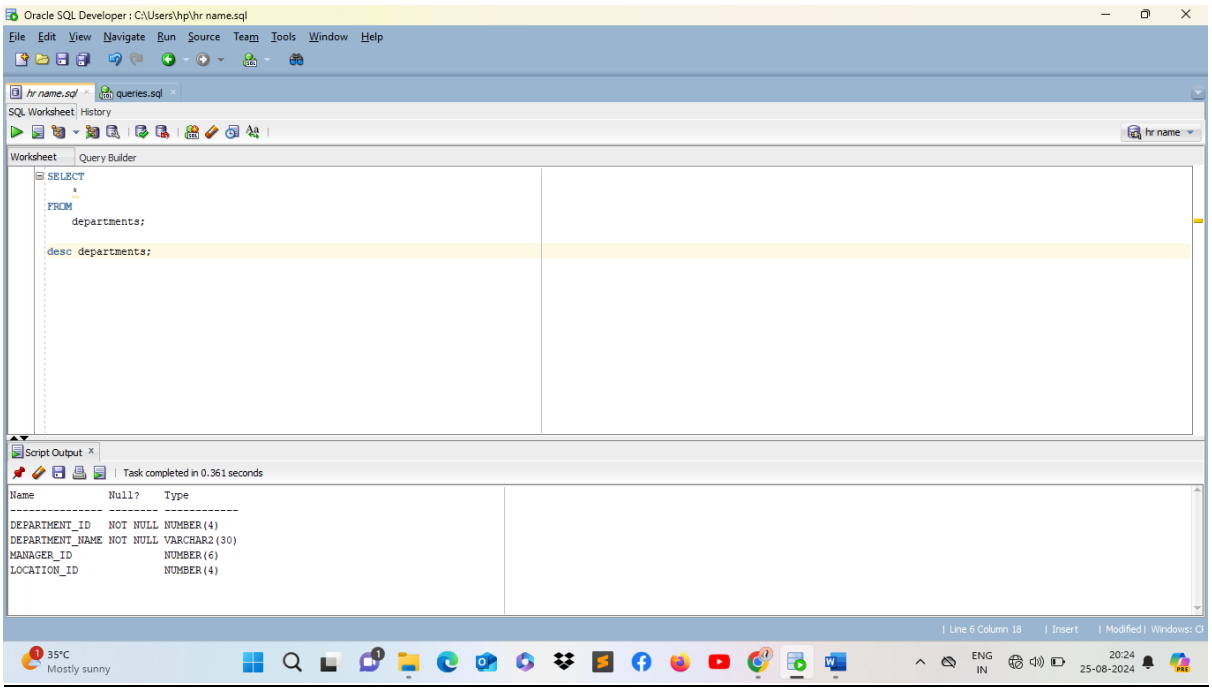
Command - line:

- In command line, we have two types of command
    1) Single-line command.
    2) Multi-level command.



Describe:

- Describe – it is used to describe the table
- And also if you want to see that what datatype we have used in the table then we can use describe
- Syntax: describe or desc table_name;

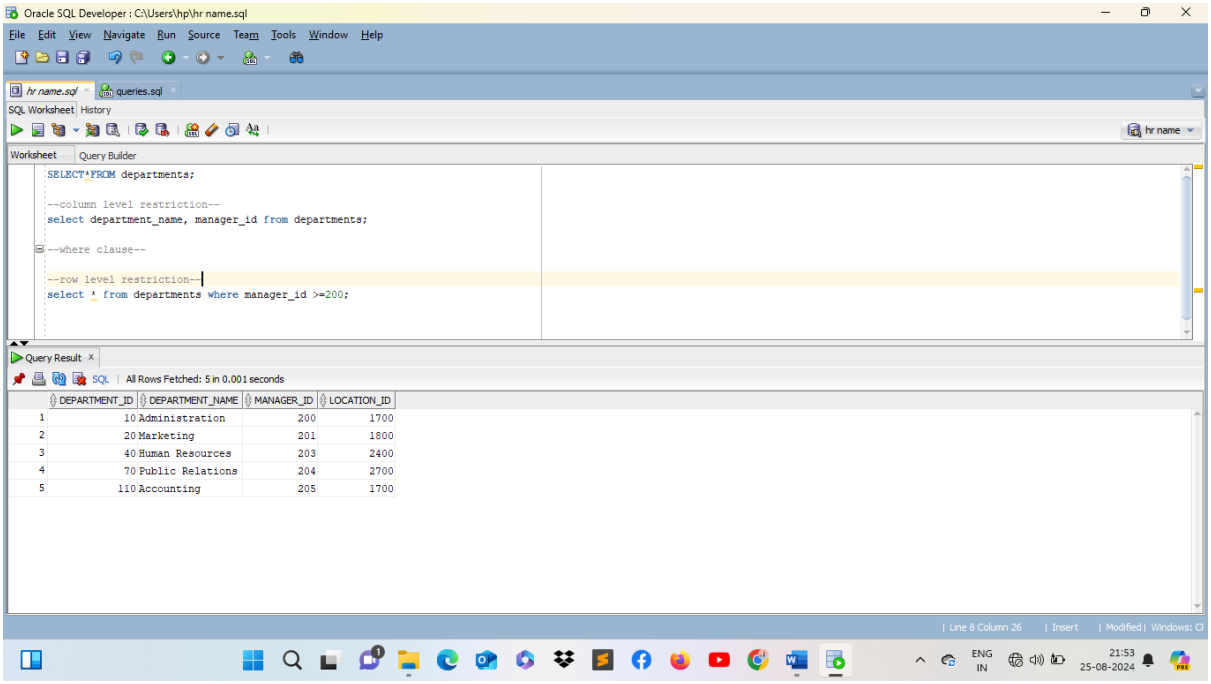


Datatypes in oracle SQL:

- Varchar2
- Char
- Number
- Date
- Time
- OB large object
- CLOB – char large object
- BLOB – binary large object

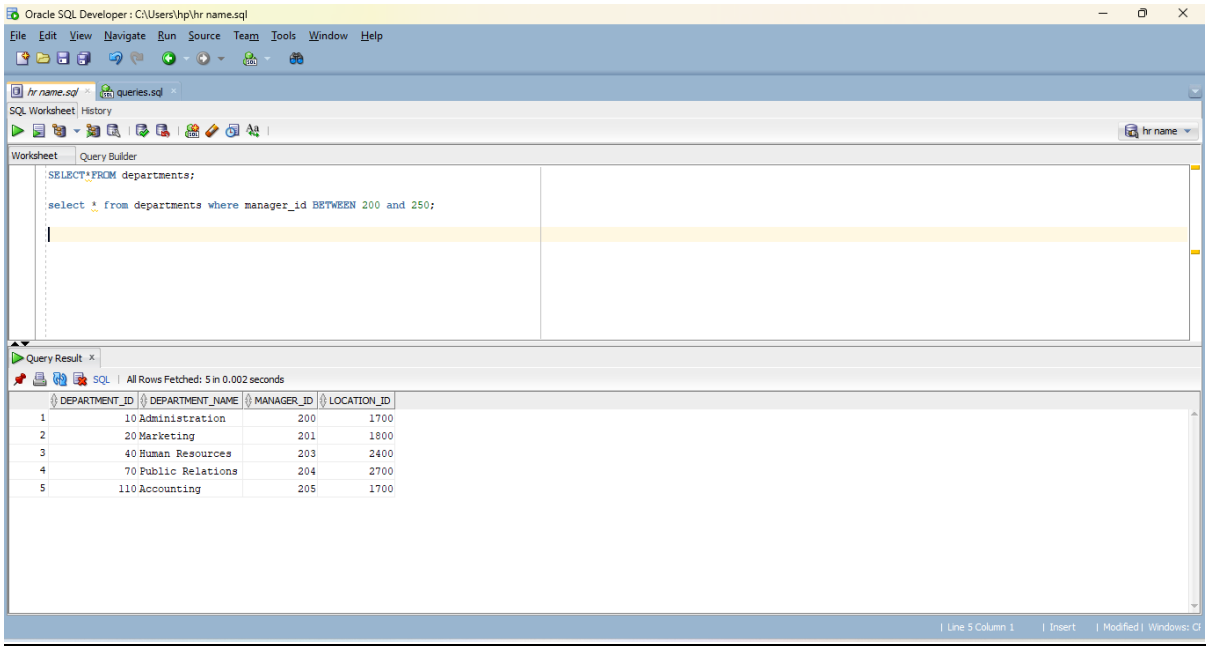
Row level restriction: (WHERE CLAUSE)

- Where clause is mainly used for row level restriction
- When you want to retrieve particular row then we need to use where clause



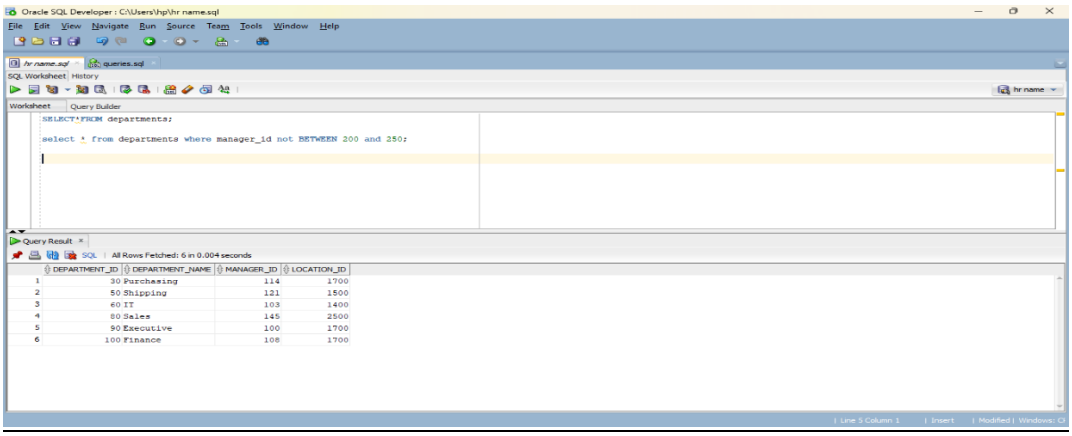
BETWEEN & AND operator:

- This operator is used to get an output within the given range
- Between, and both are keywords for this Queries
- Syntax: select * from table_name where column_name between (range value) and (range value)



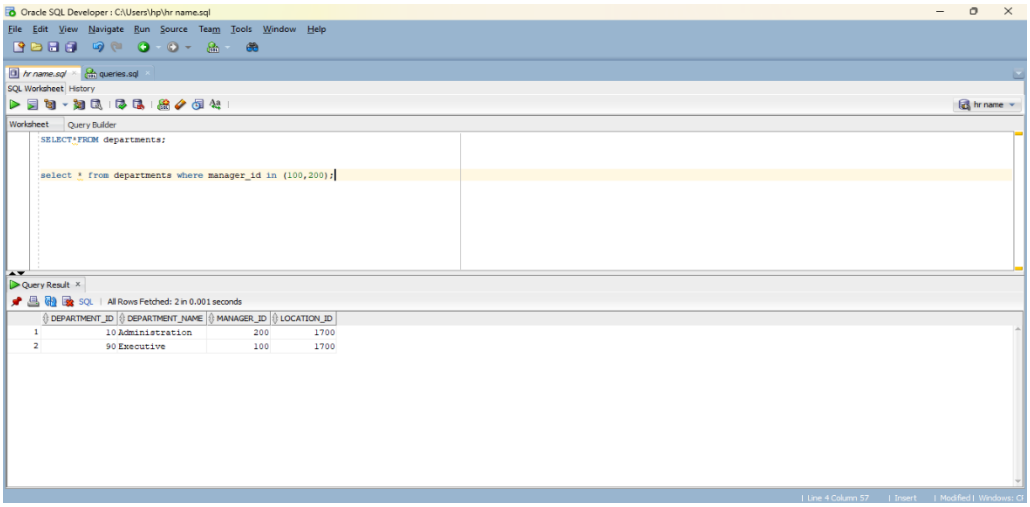
NOT BETWEEN:

- This operator is used to get specific value not within the given range
- For Example: if I give the condition not between 10 and 20. It will return every value expect the given range that 10 and 20.
- Syntax: select * from table_name where column_name not between (range value) and (range value)



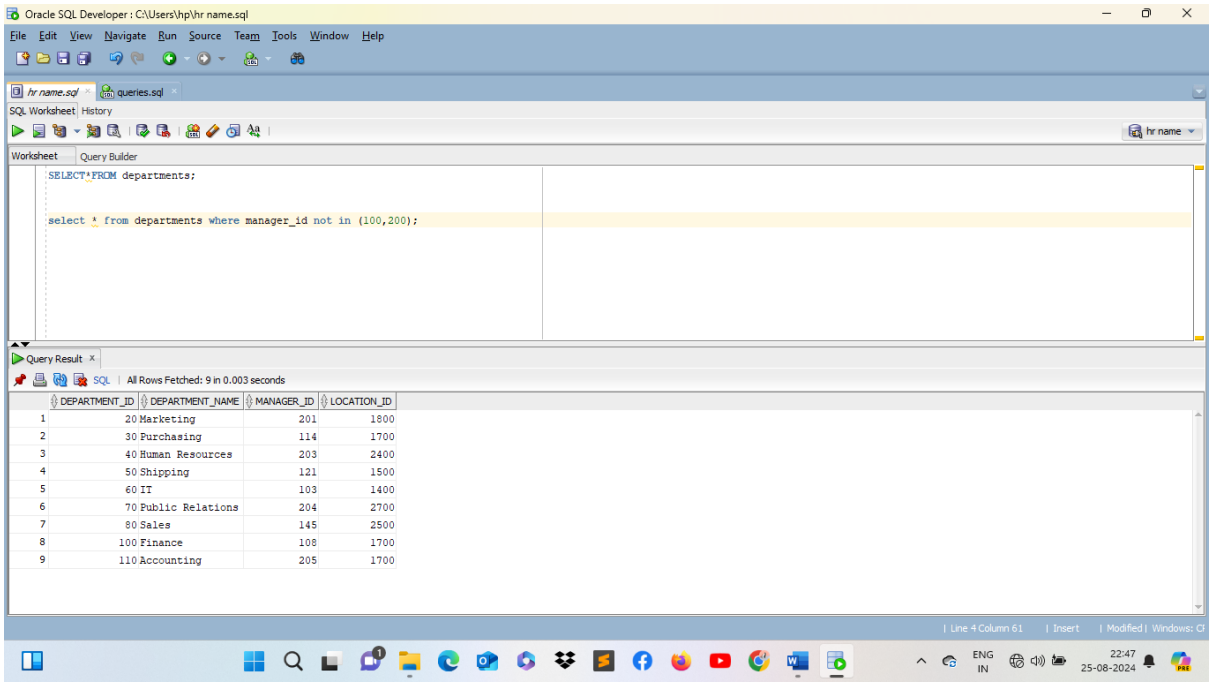
IN and NOT IN operator:

- IN operator is used to when you want to get more than one extract value then we need to use in operator.
- Syntax: select * from table_name where id in (10,20);
- This output will be whose having id is 10 and 20



NOT IN operator:

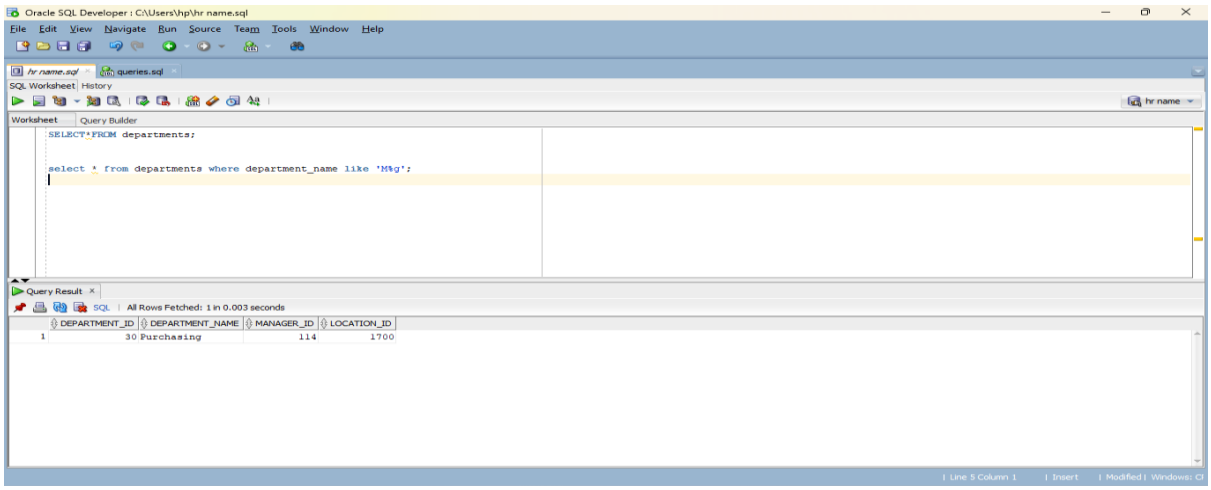
- Syntax: select * from table_name where id not in (10,20);
- It will return all records that are not any of the values in this list.

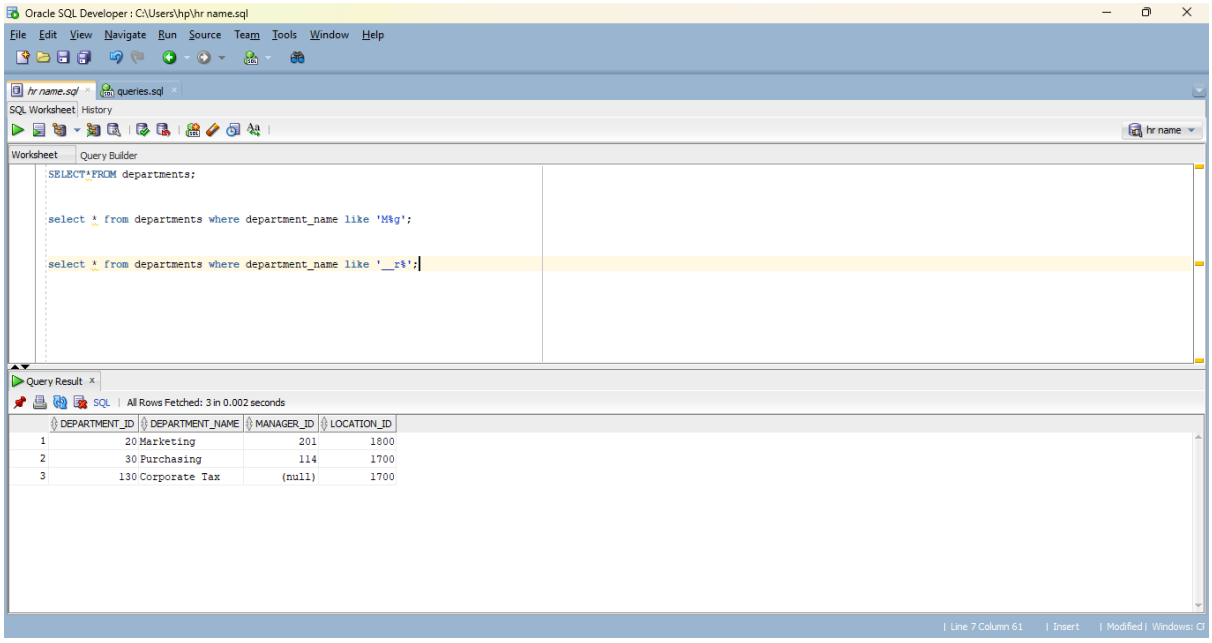


LIKE operator:(%, _);

- When we don't know the extract values or data then we need to use like operator
- In like operator we have 2 methods
- % - It can be anything
- _ only one position. it could be character or number
- Syntax: select * from table_name where column_name like 'M%';

- If you know first letter and last letter then the syntax would be
- Syntax: select * from table_name where column_name like ‘M%g’;
- If you know only the middle letter then we need to use ‘_e’;

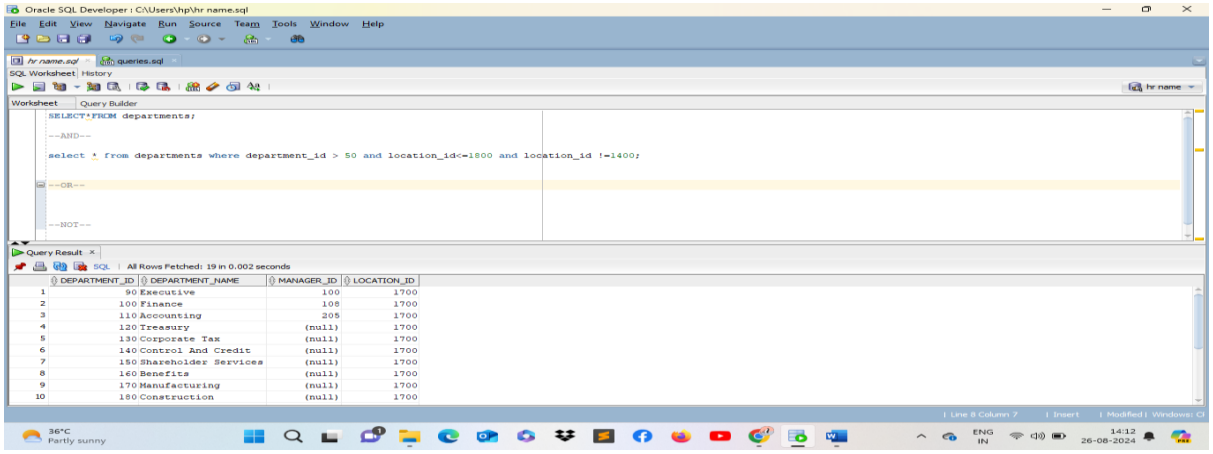


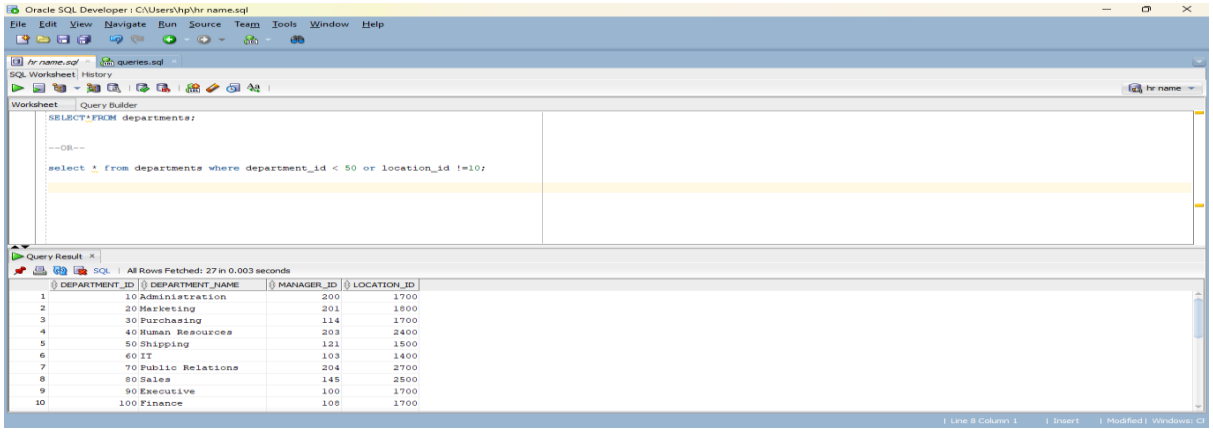


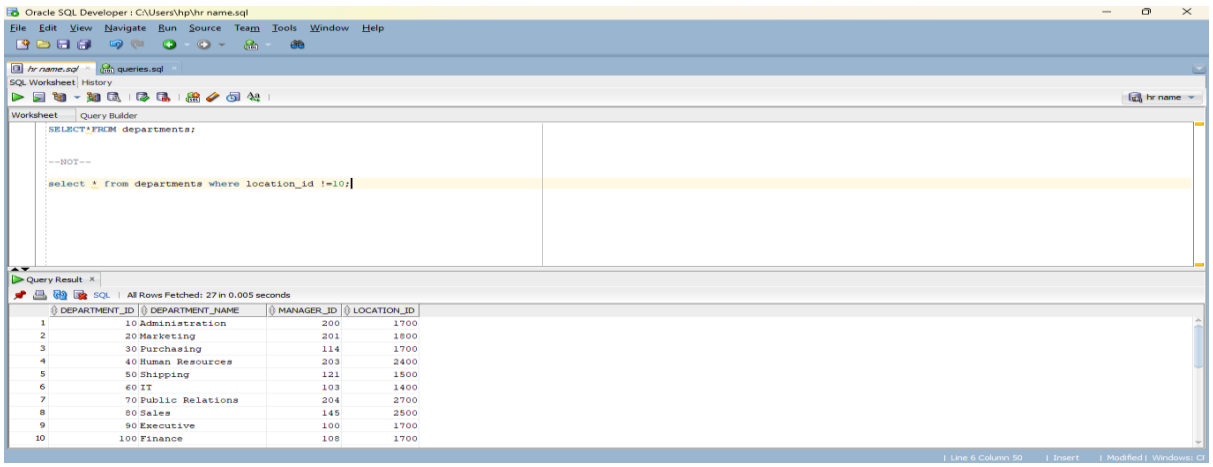
Logical operator:

- When we want to verify one or more condition in where clause then we need to use logical operator
- In logical operator contains of 3 types
- AND: Combines two or more conditions and returns true only if all conditions are true.

- OR: Combines two or more conditions and returns true if at least one condition is true.
- NOT: Reverses the result of a condition, returning true if the condition is false, and vice versa.







Delimitres:

- When you want to use apostrophe then we need to use “q”
- q – it is keyword for delimiters
- Syntax : select q’ [Happy coding]’ from dual;