Displaying Distinct Rows

Thursday, January 20, 2022

The DISTINCT keyword is used to suppress duplicate values. The syntax is: SELECT DISTINCT column FROM tablename;

SELECT DISTINCT City FROM Student;

City Bhubaneswar Jharkhand Uttar Pradesh Randai Rajastan Delhi Cuttack Kolkota

Use of Arithmetic Expressions The arithmetic expressions are used to display mathematically

calculated data. The syntax is: SELECT column, expression FROM tablename;

SELECT Name, Age, Age+3 FROM Student;

Name	Age	Age+3
Ram	19	22
Uday	20	23
Vikas *	19	22
Sweta	^{VT} 19	22
Yogesh	18	21
Smriti	20	23
Sudam	21	24
Vikas	23	26
Manish	19	22

SELECT Name, Age, Age+3 "Passing Age"FROM Student;

Name	Age	Passing Age
Ram	19	22
Uday	20	23
Vikas	19	22
Sweta	19	22
Yogesh	18	21
Smriti	20	23
Sudam	21	24
Vikas	23	26
Manish	19	22
	Ram Uday Vikas Sweta Yogesh Smriti Sudam Vikas	Ram 19 Uday 20 Vikas 19 Sweta 19 Yogesh 18 Smriti 20 Sudam 21 Vikas 23

Concatenation joins a column or a character string to another column. The syntax is:

Concatenation

SELECT column1||' '||column2 [AS] ALIAS FROM tablename;

SELECT Name||' '||City FROM Student; SELECT Name||' '||City AS "Address"FROM Student;

Name||' '||City Address Ram Bhubaneswar Ram Bhubaneswar

Hari Bhubaneswar	Hari Bhubaneswar
Uday Jharkhand	Uday Jharkhand
Vikas Uttar Pradesh	Vikas Uttar Pradesh
Sweta Ranchi	Sweta Ranchi
Yogesh Rajastan	Yogesh Rajastan
Smriti Delhi	Smriti Delhi
Sudam Cuttack	Sudam Cuttack
Vikas Kolkota	Vikas Kolkota
Manish	Manish

Specific records can be selected by using a WHERE clause with the SELECT statement. The syntax is:

Selecting Specific Records

SELECT columns FROM tablename WHERE condⁿ; SELECT * FROM Student WHERE city= 'Bhubaneswar';

City CGPA Age Roll Name

101 Ram Bhubaneswar 19 9.0 102 Hari Bhubaneswar 6.7

Operators used in WHERE condition	LIKE Operator
Relational Operators = ex: CGPA=9.0 > ex: Age>20 < ex: Age<20 >= ex: Age>=20 <= ex: Age>=20 <= ex: Age<=20 <> or != ex: Name !='Hari' ANY ex: Age > ANY(20,23,19) ALL ex: Age > ALL(20,18)	LIKE operator uses wild cards for matching as: %: represents zero or more characters _: represents any one character ex: Name LIKE 'S%' ex: Name LIKE 'S' ex: Name LIKE '%i%' ex: Name LIKE '_i%'
	Special Operators
AND ex: City='Bhubaneswar' AND Age=20 OR ex: City = 'Bhubaneswar' OR Age=20 NOT ex: NOT(Age=20 OR Age=21)	IN ex: City IN('Delhi','Cuttack','Ranchi') BETWEEN ex: Age BETWEEN 20 AND 22 IS NULL ex: SELECT Name FROM Student WHERE Age is NULL;

Stud (roll, name, age) Column

ALTER Statement

ROLL

	NAME AGE		VARCHAR2(20) NUMBER(2)						
Adding a Nev	/ Column								
ALTER TAB	ALTER TABLE tablename ADD(column definiti								

NULL? Datatype

NUMBER(6)

VARCHAR2(20)

NULL?

Datatype

NUMBER(6)

ALTER TABLE Stud ADD (address number(20)); Column ROLL

Raj

Ajay

Pinky

Rahul

6 Aditya

Soham

3 Sivam

NUMBER(2) AGE

NAME

ID FNAME LNAME AGE GENDER LOC

Kumar

Panda

Prasad

Singh

Kumar

Tiwari

rows selected.

AGE

23

22

26

24

Das

23

26 M

22 M

24 M

29 M

ADDRESS	NUMBER(20)	

IND

AUS

ENG

AUS

BAN

IND

Modifying an Existing Column ALTER TABLE tablename MODIFY(column definition);

ALTER TABLE Stud MODIFY(address varchar2(20));

NULL? Datatype Column ROLL NUMBER(6) NAME VARCHAR2(20) AGE NUMBER(2)

	ADDRESS		VARCHAR2(20)	
Dropping a Co	olumn			
ALTER TABI	LE tablenam	ne DROP	COLUMN colur	nnname;
ALTER TABL	E Stud DRC	P COLU	MN address;	

Column NULL? ROLL

Customer ID, First name, Last name, age of customer, gender of customer and present address of customer

NAME VARCHAR2(20)

AGE	NUMBER(2)	

Datatype

NUMBER(6)

	Aditya	Das	29	M	IND	12.	Display the IDs of customer who don't live in ENG.	
7	Avik	Das	28	M	IND		 Display the customer IDs and gender who either lives in AUS or age is 26. Fetch all customer details whose name end with 'Das'. 	
8	Shital	Jena	23	F	ENG		 List all customer IDs whose name starts with 'S'. List out the customer age whose first name has 'i' as the 3rd letter. 	
9	Soham	Tiwari	26	M	NZ		No. Retrieve the customer details whose age is between 24 years to 28 years. List out the customer address whose name has a 'n' alphabet in it.	
> s	select	FNAM	Ε.	ΙΝΔΜΕ	from	cust	:	
					TT OIII			
ME		LNAME			11 0111			
					11 3111			
ΛE		LNAME			11 311			
AE /		LNAME Kumar Panda Prasad	 d		11 311			
ME y am		LNAME Kumar Panda Prasad Singh	 d		11 311			
ME y am ky		LNAME Kumar Panda Prasad Singh Kumar	 d		11 311			
ME / am <y< td=""><td></td><td>LNAME Kumar Panda Prasad Singh Kumar Das</td><td> d</td><td></td><td>11 311</td><td></td><td></td><td></td></y<>		LNAME Kumar Panda Prasad Singh Kumar Das	 d		11 311			
ME y am		LNAME Kumar Panda Prasad Singh Kumar	 d		11 6111			

Create a table Customer with following attributes:

2. Display the structure of the created customer table.

7. Fetch the unique addresses from customer table.

10. Retrieve the IDs of customer who lives in IND.

4. Retrieve and display the customer table with all values of attributes.

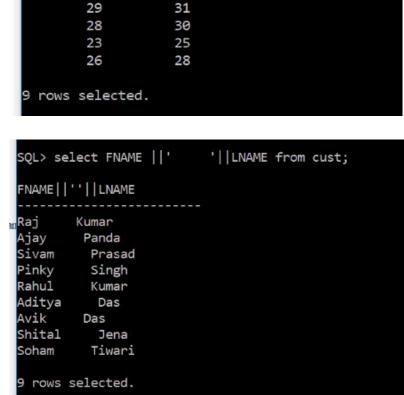
8. Display the current age and the age of customers after 2 years. 9. Combine the first and last name of customers and display it.

Display the customer details whose age is more than 25 years.

3. Insert the following values in the table.

5. Retrieve and display all customer names.

6. Display the gender of all customers.



SQL> select AGE, AGE+2 "age_new" from cust;

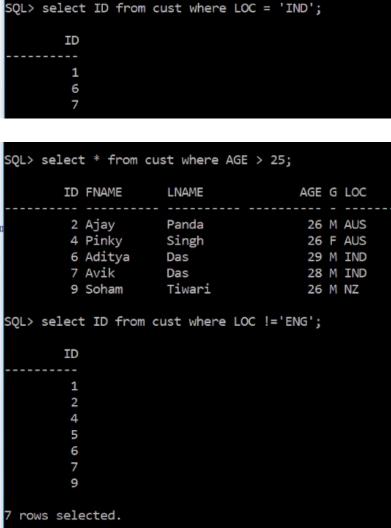
age_new

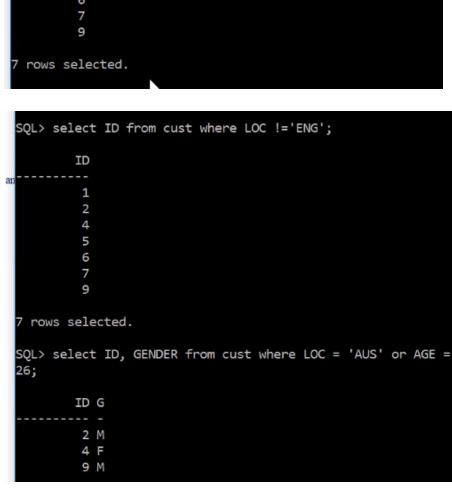
25

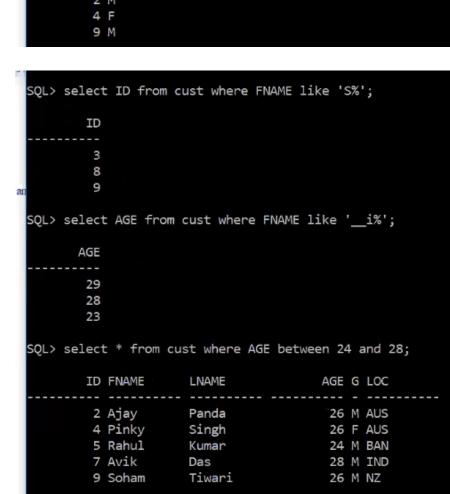
24

28

26







ID	FNAME	LNAME	AGE	GENDER	LOC	Create a table Customer with following attributes:
						Customer ID, First name, Last name, age of customer, gender of customer and present address of customer.
1	Raj	Kumar	23	M	IND	Display the structure of the created customer table.
						Insert the following values in the table.
2	Ajay	Panda	26	M	AUS	 Retrieve and display the customer table with all values of attributes.
						Retrieve and display all customer names.
3	Sivam	Prasad	22	M	ENG	Display the gender of all customers.
						Fetch the unique addresses from customer table.
۱	Pinky	Singh	26	F	AUS	Display the current age and the age of customers after 2 years.
						9. Combine the first and last name of customers and display it.
5	Rahul	Kumar	24	M	BAN	10. Retrieve the IDs of customer who lives in IND.
5	Aditya	Das	29	M	IND	 Display the customer details whose age is more than 25 years.
۰	Auitya	Das	29	M	IND	Display the IDs of customer who don't live in ENG.
7	Avik	Das	28	M	IND	Display the customer IDs and gender who either lives in AUS or age is 26.
1	AVIK	Das	20		II.	14. Fetch all customer details whose name end with 'Das'.
8	Shital	Jena	23	F	ENG	 List all customer IDs whose name starts with 'S'.
						16. List out the customer age whose first name has 'i' as the 3 rd letter.

17. Retrieve the customer details whose age is between 24 years to 28 years. 18. List out the customer address whose name has a 'n' alphabet in it.