

NUMBER (PRECISION, SCALE) DATA TYPE.

NUMBER - WILL ACCEPT NUMERIC TYPE OF DATA

0	10	3.5	3/4	1 1/2
2	100	4.22		
3	999		2/1	3 1/2
4	5242	5.97		3 1/2
5		6.471	1/2	
6	42788			6 1/9
7	521489	7.5217		
8				5 1/4
9				

PRECISION:-

PRECISION WILL ACCEPT DIGIT TYPE OF DATA.

[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]

→ PRECISION IS MANDATORY

SCALE:-

SCALE JOB IS TO GIVE THE DECIMAL POINT.

→ SCALE BY DEFAULT VALUE IS ZERO

→ SCALE IS OPTIONAL

NOTE POINT:-

NUMBER (PRECISION, SCALE) WILL ACT'S FROM RIGHT SIDE TO LEFT SIDE

CHAR(10)
VARCHA(12)
NUMBER (PRECISION, SCALE) VARCHA(13)

0 1 2 3 4 (5) 6 7 8 9

M.M
EDIPPA

NUMBER (11)

7777

5 5 5 5 5 5 5 5 5 5 5

NUMBER(4)

5 5 5 5

NUMBER(4)

999 NUMBER(4) $\begin{array}{cccc} \underline{5} & \underline{5} & \underline{5} & \underline{5} \\ & \underline{7} & \underline{7} & \underline{7} \end{array}$

NUMBER(3)
2975 $\begin{array}{ccc} \underline{9} & \underline{9} & \underline{9} \end{array}$

NUMBER(4) $\begin{array}{cccc} \underline{2} & \underline{9} & \underline{7} & \underline{5} \end{array}$

9982149783

NUMBER(10)

$\underline{9} \ \underline{9} \ \underline{8} \ \underline{2} \ \underline{1} \ \underline{4} \ \underline{9} \ \underline{7} \ \underline{8} \ \underline{3}$

NUMBER (PRECISION, [SCALE])

MARKER 129.72

NUMBER (5, 2)
 $\begin{array}{cc} \downarrow & \downarrow \\ P > S \end{array}$

EX: (5)

$\underline{1} \ \underline{2} \ \underline{9} \ \underline{7} \ \underline{2}$

NUMBER (4, 2)
 $\begin{array}{cc} \downarrow & \downarrow \\ P > S \end{array}$

62.72

$\underline{5} \ \underline{5} \ \underline{.} \ \underline{5} \ \underline{5}$

NUMBER (4, 2)
 $\begin{array}{cc} \downarrow & \downarrow \\ P > S \end{array}$

EX: (8)

$\underline{6} \ \underline{2} \ \underline{.} \ \underline{7} \ \underline{2}$

NUMBER (5, 9)
 $\begin{array}{cc} \downarrow & \downarrow \\ P < S \end{array}$

$\bullet \ \underline{0} \ \underline{0} \ \underline{0} \ \underline{0} \ \underline{8} \ \underline{8} \ \underline{8} \ \underline{8} \ \underline{8}$

NUMBER (4, 7)
 $\begin{array}{cc} \downarrow & \downarrow \end{array}$

NUMBER (4, 7)
 $\downarrow \quad \downarrow$
 $P < S$

• 0 0 0 8 8 8 8

109.52

NUMBER (5, 2)

6304 8412
 9442

$\downarrow \quad \downarrow$
 $P > S$
1 0 9 5 2

NUMBER (12)

6 3 0 4 8 4 1 2 9 1 4 2

- 109.52

NUMBER (2, 5)
 $\downarrow \quad \downarrow$
 $P < S$

999.99

• 0 0 0 7 2

NUMBER (4, 5)

+ 0 0 0 7 2

NUMBER (5, 2)

9 9 9 9 9

LARGE OBJECTS

- CHARACTER LARGE OBJECT (CLOB)
- BINARY LARGE OBJECT (BLOB)

BINARY LARGE OBJECT WILL ACCEPT
 'A-Z', 'a-z', '0-9'

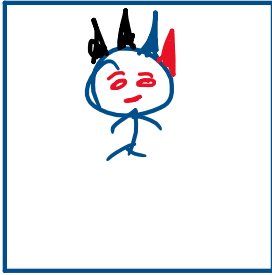
SPECIAL CHARACTERS (\$, @, *, #, -, ' - etc)

ALPHANUMERIC 'ABC123'

→ WHENEVER WE USE BINARY -
 OBJECT WE SHOULD PROVIDE

→ WHENEVER WE USE BINARY LARGE OBJECT WE SHOULD PROVIDE SINGLE QUOTES (' ')

→ BLOB IS USED TO STORE UP TO 4GB OF DATA IN BINARY FORMAT



SYNTAX:-
BLOB

0	1	0
0	0	1
1	1	0
0	0	1

CONSTRAINTS :-

CONSTRAINT ARE THE RULES AND RESTRICTIONS GIVE TO THE COLUMN.

- UNIQUE CONSTRAINT
- NOT NULL CONSTRAINT
- CHECK CONSTRAINT
- PRIMARY KEY CONSTRAINT
- FOREIGN KEY CONSTRAINT.

NOTEPOINT :-

DATATYPES ARE MANDATORY
CONSTRAINT ARE OPTIONAL

UNIQUE CONSTRAINT:-

UNIQUE CONSTRAINT AVOIDS THE REPEAT VALUES IN THE COLUMN.

REPEAT MEAN MORE THAN ONE TIME
DUPLICATE

AADHAR

AADHAR ID NUMBER (12) UNIQUE
6301 8214 8219
6301 8214 8218

NOT NULL:-

NOT NULL AVOID THE NULL VALUE IN THE COLUMN(S)

NULL

BLANK SPACE

AADHAR

AADHAR ID NUMBER (12) UNIQUE NOT NULL	A_NAME VARCHAR2 (14) NOT NULL	GENDER CHAR (6) NOT NULL
8142 6301 6712	NIBBA	MALE
8142 6301 6711	NIBBA	MALE

CHECK CONSTRAINT:-

CHECK IS USED FOR
EXTRA VALIDATION.

CHECK IS USED FOR
EXTRA VALIDATION.

→ CHECK IS USED FOR
NUMERIC TYPE OF DATA.

Syntax:-

CHECK (LENGTH (COLUMN-NAME) = size);

0-9-1

10-99-2

100-999-3

1000-9999-4

AADHAR

A-ID NUMBER(12) UNIQUE NOT NULL CHECK (LENGTH (A-ID) = 12)	A_NAME VARCHAR(12) NOT NULL	GENDER NOT NULL	DOB DATE NOT NULL
8142 63014 878	CHAPRI	MALE	14 NOV 2000
8142 63014 8-	CHAPRI	MALE	14 NOV 2000

PRIMARY KEY

PRIMARY KEY IS USED TO IDENTIFY
THE RECORDS UNIVELY FROM THE
PARTICULAR TABLE

PROPERTIES OF PRIMARY KEY

PROPERTIES OF PRIMARY KEY

PRIMARY KEY IS COMBINATION OF UNIQUE CONSTRAINT AND NOT NULL CONSTRAINT.

→ WE CAN HAVE ONLY ONE PRIMARY KEY IN A TABLE

→ PRIMARY WILL NOT ACCEPT REPEAT DATA/VALUES AND NULL VALUES IN THE COLUMN

BECAUSE PRIMARY KEY IS COMBINATION OF UNIQUE CONSTRAINT AND NOT NULL CONSTRAINT.