

Data type	
tipus	descripció
<b>boolean</b>	<i>y/n, yes/no, 1/0, t/f, true/false</i>
<b>integer, int, int4</b>	<i>enter</i>
<b>smallint, int2</b>	<i>enter de fins a 5 digits (-32000/32000)</i>
<b>bigint, int8</b>	<i>desde (-910<sup>17</sup>/910<sup>17</sup>)</i>
<b>serial/bigserial</b>	<i>enter autoincremental int/bigint</i>
<b>decimal/numeric(t,d)</b>	<i><b>t</b>=total digits /<b>d</b>=total decimalsprecisió</i>
<b>float</b>	<i>decimal fins a 6 decimals</i>
<b>double precision</b>	<i>decimal fins a 15 xifres</i>
<b>character varyng(n), varchar(n)</b>	<i>longitud de 'n' caràcters</i>
<b>character(n), char(n)</b>	<i>char de longitud 'n' obligatòria</i>
<b>text, varchar</b>	<i>longitud variable il.limitada</i>
<b>date</b> 'YYYY-MM-DD'	<i>desde 4317A.C. fins 32767D.C.</i>
<b>date</b> 'DD-MM-YYYY'	SET DATATYPE 'European'
<b>time</b> 'hh:mm:ss'	<i>guarda la hora</i>
<b>timestamp</b> 'YYYY-MM-DD hh:mm:ss'	<i>data i hora</i>
<b>timestampptz</b> 'YYYY-MM-DD hh:mm:ss±tz'	<i>data i hora guardael TIME ZONE'</i>

AND	WHERE [atr]=[value] AND [atr]=[value];
OR	WHERE [atr]=[value] AND IS NOT NULL;
IN	WHERE [atr] IN ([value], [value], ...);
IN	WHERE [atr] IN (SELECT [atr] FROM [table] WHERE [condició]);
BETWEEN	WHERE [atr] BETWEEN [x] AND [y];

### Operadors relacionals

### Funcions

#### STRING FUNCTIONS

**char\_length**([varchar])

**upper**([string])      **lower**([string])

**position**( '[char]' **IN** [string] )

**substring**([string], n, m) --n:from|m:to

Exemple casting...

"some\_string"::int    |    867::varchar

#### MATH/OTHERS FUNCTIONS

SELECT **count**(\*) FROM [taula];

SELECT **sum**([atr]) FROM [taula];

SELECT **DISTINCT** [atr] FROM [table];

max/min([atr])      abs([num])

round([float])      trunc([float])

#### TIME FUNCTIONS

**current date** --Data actual YY-MM-DD

**current time** --temps hh:mm:ss+tz

**current\_timestamp** --currDate+currTime

**now()**      --=current\_timeatamp

**localtime**    --temps hh:mm:ss

**localtimestamp** -- currDate + localtime

**extract**([time\_field]... **from** [timestamp]);

-- Time fields:

century, decade, year, month, day, hour, minute,

second,dow(DayOfWeek), doy, epoch, week, ...

### AGRUPAR RESULTAT

SELECT count(\*) FROM [taula] **GROUP BY** [atr];

-condicions als grups

SELECT count(\*) FROM x **GROUP BY** [atr]

**HAVING** count(\*)|[grup\_atr][condició];

# PostgresQL

..:~\$ sudo service postgresql start // if isn't (on debian)

..:~\$ sudo -u postgres psql //accés consola postgres

### Comparadors

operador	descripció
= / <>	equal/not equal
< / >	less/more than
<=/ >=	more/less or equal
IS/IS NOT	_!!!per a NULL!!! _

### Comandes bàsiques

\l      --llista les bd  
\c [db\_name]--connectas a db  
\d      --show taules de db  
\d [taula]    --show table's atr/info  
\i [path/to/script] --importar script

### COMANDES BD

CREATE DATABASE [name];    --crear nova BD

DROP DATABASE [name];    --Elimina DB

### COMANDES BÀSIQUES TAULES

CREATE TABLE [name] ([atr] [type] [modifier],

define pkey — id serial primary key,  
name varchar(30) NOT NULL,  
PRIMARY KEY(id),  
CONSTRAINT [fk\_name] FOREIGN KEY([this\_atr])  
REFERENCES [foreign\_table]([atr])  
);

TRUNCATE TABLE [name]; --buida la taula

INSERT INTO [taula] (atr1, atr2, ...)

VALUES ([value1], [value2], ...);

INSERT INTO [taula] VALUES ([value1], [value2], ...);

INSERT INTO [taula] ([atr\_default],...) VALUES (default, ...);

UPDATE [table] SET [atr]=[value] WHERE [atr]=[value];

DELETE FROM [table] WHERE [atr][comp][value];

### ACCIONS AMB ALTER

ALTER TABLE [name] ...

editar taules

...**ADD COLUMN** [nom] [type] ~ [modifier];

...**RENAME COLUMN** [nom\_from] **TO** [nom\_to];

...**DROP COLUMN** [atr];

...**ALTER COLUMN** [atr] **SET DEFAULT** [value];

...**DROP CONSTRAINT** [constr\_name];

...[**SET** | **DROP**] **NOT NULL**;

...**ADD CONSTRAINT** [nom\_restricció]

**CHECK** ([atr][condició]);--restricció del camp

...**ADD CONSTRAINT** [const\_name]

**UNIQUE** (columns);

editar relacions

...**ADD PRIMARY KEY** ([atr]);

...**DROP CONSTRAINT** [constr\_name];

...**ADD CONSTRAINT** [contr\_name]

**FOREIGN KEY** ( [atr\_fk] )

**REFERENCES** [taula\_origen] ([atr\_origen]);

### INDEX

CREATE [**UNIQUE**] **INDEX** [idx\_name] **ON** [taula] ([atr]);

opcional

DROP INDEX [name];

### VIEWS

**CREATE VIEW** [nom] **AS SELECT** ...;

SELECT \* FROM [view];

**DROP VIEW** [nom];