PSQL

1> PSQL Data Types:

| **Name** | **Aliases** | **Description** |
| --- | --- | --- |
| bigint | int8 | signed eight-byte integer |
| bigserial | serial8 | autoincrementing eight-byte integer |
| bit [ (***n***) ] |  | fixed-length bit string |
| bit varying [ (***n***) ] | varbit [ (***n***) ] | variable-length bit string |
| boolean | bool | logical Boolean (true/false) |
| box |  | rectangular box on a plane |
| bytea |  | binary data (“byte array”) |
| character [ (***n***) ] | char [ (***n***) ] | fixed-length character string |
| character varying [ (***n***) ] | varchar [ (***n***) ] | variable-length character string |
| cidr |  | IPv4 or IPv6 network address |
| circle |  | circle on a plane |
| date |  | calendar date (year, month, day) |
| double precision | float8 | double precision floating-point number (8 bytes) |
| inet |  | IPv4 or IPv6 host address |
| integer | int, int4 | signed four-byte integer |
| interval [ ***fields*** ] [ (***p***) ] |  | time span |
| json |  | textual JSON data |
| jsonb |  | binary JSON data, decomposed |
| line |  | infinite line on a plane |
| lseg |  | line segment on a plane |
| macaddr |  | MAC (Media Access Control) address |
| macaddr8 |  | MAC (Media Access Control) address (EUI-64 format) |
| money |  | currency amount |
| numeric [ (***p***, ***s***) ] | decimal [ (***p***, ***s***) ] | exact numeric of selectable precision |
| path |  | geometric path on a plane |
| pg\_lsn |  | PostgreSQL Log Sequence Number |
| pg\_snapshot |  | user-level transaction ID snapshot |
| point |  | geometric point on a plane |
| polygon |  | closed geometric path on a plane |
| real | float4 | single precision floating-point number (4 bytes) |
| smallint | int2 | signed two-byte integer |
| smallserial | serial2 | autoincrementing two-byte integer |
| serial | serial4 | autoincrementing four-byte integer |
| text |  | variable-length character string |
| time [ (***p***) ] [ without time zone ] |  | time of day (no time zone) |
| time [ (***p***) ] with time zone | timetz | time of day, including time zone |
| timestamp [ (***p***) ] [ without time zone ] |  | date and time (no time zone) |
| timestamp [ (***p***) ] with time zone | timestamptz | date and time, including time zone |
| tsquery |  | text search query |
| tsvector |  | text search document |
| txid\_snapshot |  | user-level transaction ID snapshot (deprecated; see pg\_snapshot) |
| uuid |  | universally unique identifier |
| xml |  | XML data |

2> Operators:

= Equal to

< Less than

> Greater than

<= Less than or equal to

>= Greater than or equal to

<> Not equal to!=Not equal to

LIKE Check if a value matches a pattern (case sensitive)

ILIKE Check if a value matches a pattern (case insensitive)

AND Logical AND

OR Logical OR

IN Check if a value is between a range of values

BETWEEN Check if a value is between a range of values

IS NULL Check if a value is NULL

NOT Makes a negative result e.g. NOT LIKE, NOT IN, NOT BETWEEN

3> Keywords:

1. Limit: Select \* from person limit 10;
2. Offset: Select \* from person offset 5 limit 10;

//Offset ignores first 5 records.

1. In: Select \* from person where country IN (‘India’, ‘US’, ‘UK’);
2. Between: Select \* from person where ID BETWEEN ‘1’ AND ‘100’;
3. Like/ILike: Select \* from person where email like ‘%.com’;

//Ilike is used for case insensitive.

//Use \_ for single character as a wild card.

1. Distinct: Select DISTINCT country from person;
2. Group By: This is used for grouping of records based on some column.

Select country, COUNT(\*) from person GROUP BY country;

1. ORDER By: ASC, DESC used for sorting purpose.
2. Having:

Select country, COUNT(\*) from person GROUP BY country HAVING COUNT(\*) > 5;

/\*Select only records where from one country there are more than 5 person.\*/

10) MIN/MAX/AVG/SUM:

Select SUM(age) from person;