CLUSTER CREATING

```
C:\Program Files\PostgreSQL\12\bin>initdb -D e:\Cluster -U dbuser -W
The files belonging to this database system will be owned by user "PRATIK".
This user must also own the server process.

The database cluster will be initialized with locale "English_United States.1252
".
The default database encoding has accordingly been set to "WIN1252".
The default text search configuration will be set to "english".

Data page checksums are disabled.

Enter new superuser password:
Enter it again:

fixing permissions on existing directory e:/Cluster ... ok
creating subdirectories ... ok
selecting dynamic shared memory implementation ... windows
selecting default max_connections ... 100
selecting default shared_buffers ... 128MB
selecting default time zone ... Asia/Calcutta
creating configuration files ... ok
running bootstrap script ... ok
performing post-bootstrap initialization ... ok
syncing data to disk ... ok

initdb: warning: enabling "trust" authentication for local connections
You can change this by editing pg_hba.conf or using the option -A, or
--auth-local and --auth-host, the next time you run initdb.

Success. You can now start the database server using:

    pg_ctl -D ^"e^:^\Cluster^" -l logfile start
```

OPEN THE postgresql.conf file IS THEIR IN CLUSTER FOLDER AND CHANGE THE POST NUMBER

base	7/15/2020 3:28 PM	File folder	
global	7/15/2020 3:38 PM	File folder	
pg_commit_ts	7/15/2020 2:55 PM	File folder	
pg_dynshmem	7/15/2020 2:55 PM	File folder	
pg_logical	7/15/2020 3:38 PM	File folder	
pg_multixact	7/15/2020 2:55 PM	File folder	
pg_notify	7/15/2020 3:38 PM	File folder	
pg_replslot	7/15/2020 2:55 PM	File folder	
pg_serial	7/15/2020 2:55 PM	File folder	
pg_snapshots	7/15/2020 2:55 PM	File folder	
pg_stat	7/15/2020 3:38 PM	File folder	
pg_stat_tmp	7/15/2020 3:38 PM	File folder	
pg_subtrans	7/15/2020 2:55 PM	File folder	
pg_tblspc	7/15/2020 2:55 PM	File folder	
pg_twophase	7/15/2020 2:55 PM	File folder	
pg_wal	7/15/2020 2:55 PM	File folder	
pg_xact	7/15/2020 2:55 PM	File folder	
pg_hba.conf	7/15/2020 2:55 PM	CONF File	5 KB
pg_ident.conf	7/15/2020 2:55 PM	CONF File	2 KB
PG_VERSION	7/15/2020 2:55 PM	File	1 KB
postgresql.auto.conf	7/15/2020 2:55 PM	CONF File	1 KB
postgresql.conf	7/15/2020 3:39 PM	CONF File	27 KB
postmaster.opts	7/15/2020 3:18 PM	OPTS File	1 KB

OPEN THE postgresql.conf FILE AND CHNAGE THE POST NUMBER

```
#------------------------------------------------------------------------------
# CONNECTIONS AND AUTHENTICATION
#------------------------------------------------------------------------------

# - Connection Settings -

#listen_addresses = 'localhost'        # what IP address(es) to listen on;
                                       # comma-separated list of addresses;
                                       # defaults to 'localhost'; use '*' for all
                                       # (change requires restart)
port = 5522                            # (change requires restart)
max_connections = 100                  # (change requires restart)
#superuser_reserved_connections = 3    # (change requires restart)
#unix_socket_directories = ''   # comma-separated list of directories
                                       # (change requires restart)
#unix_socket_group = ''                # (change requires restart)
#unix_socket_permissions = 0777        # begin with 0 to use octal notation
                                       # (change requires restart)
#bonjour = off                         # advertise server via Bonjour
                                       # (change requires restart)
#bonjour_name = ''                     # defaults to the computer name
                                       # (change requires restart)
```

PORT HAS BEEN CHANGED.

START THE CLUSTER/ SERVER

```
C:\Program Files\PostgreSQL\12\bin>pg_ctl -D e:\Cluster start
pg_ctl: another server might be running; trying to start server anyway
waiting for server to start....2020-07-15 15:18:47.732 IST [2976] LOG:   starting
 PostgreSQL 12.3, compiled by Visual C++ build 1914, 64-bit
2020-07-15 15:18:47.742 IST [2976] LOG:   listening on IPv6 address "::1", port 5
522
2020-07-15 15:18:47.743 IST [2976] LOG:   listening on IPv4 address "127.0.0.1",
port 5522
2020-07-15 15:18:47.977 IST [144] LOG:   database system was interrupted; last kn
own up at 2020-07-15 15:17:15 IST
2020-07-15 15:18:48.581 IST [144] LOG:   database system was not properly shut do
wn; automatic recovery in progress
2020-07-15 15:18:48.627 IST [144] LOG:   invalid record length at 0/1637090: want
ed 24, got 0
2020-07-15 15:18:48.629 IST [144] LOG:   redo is not required
.2020-07-15 15:18:48.849 IST [2976] LOG:   database system is ready to accept con
nections
 done
server started

C:\Program Files\PostgreSQL\12\bin>pg_ctl -D e:\Cluster status
pg_ctl: server is running (PID: 2976)
C:/Program Files/PostgreSQL/12/bin/postgres.exe "-D" "e:/Cluster"

C:\Program Files\PostgreSQL\12\bin>
```

- CONNECT WITH DATABASE ON THAT CLUSTER USING PgSQL

```
C:\Program Files\PostgreSQL\12\bin>psql -d paymentgatewaydb -p 5522 -u dbuser
psql: illegal option -- u
Try "psql --help" for more information.

C:\Program Files\PostgreSQL\12\bin>psql -d paymentgatewaydb -p 5522 -U dbuser
psql (12.3)
WARNING: Console code page (437) differs from Windows code page (1252)
         8-bit characters might not work correctly. See psql reference
         page "Notes for Windows users" for details.
Type "help" for help.

paymentgatewaydb=#
```

- CONNECT WITH DATABASE ON THAT CLUSTER USING PGADMIN(GUI TOOL)

PaymentGateway ✕

General   Connection   SSL   SSH Tunnel   Advanced

Host name/address | localhost

Port | 5522

Maintenance database | postgres

Username | dbuser

Role |

Service |

i   **?**   ✖ Cancel   ♻ Reset   💾 Save

- Servers (2)
  - PaymentGateway
    - Databases (2)
      - paymentgatewaydb
      - postgres
        - Casts
        - Catalogs
        - Event Triggers
        - Extensions
        - Foreign Data Wrappers
        - Languages
        - Schemas (1)
          - public
    - Login/Group Roles (9)
      - dbuser
      - pg_execute_server_program
      - pg_monitor
      - pg_read_all_settings
      - pg_read_all_stats
      - pg_read_server_files
      - pg_signal_backend
      - pg_stat_scan_tables
      - pg_write_server_files
    - Tablespaces (2)
      - pg_default
      - pg_global