

## EXAMEN 1 DEVOPS Y DESPLIGUE MODULO IV

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1: Creamos la carpeta de exame1, el volumen y la red

```
C:\ (0.22s)
cd devOps

C:\devOps (0.184s)
mkdir examen1

Directorio: C:\devOps

Mode                LastWriteTime         Length Name
----                -
d-----          02/06/2025   22:47                examen1

C:\devOps (0.109s)
cd examen1

C:\devOps\examen1 A Pair Ctrl I Dispatch Beta Ctrl Shift I
Docker run --rm -it ubuntu bash
```

Creamos nuestro volumen de goc-vol:

```
C:\devOps\examen1 (+)
C:\devOps\examen1 (@.262s)
docker volume ls

C:\devOps\examen1 (@.584s)
docker volume create goc-vol
goc-vol

C:\devOps\examen1 (@.259s)
docker volume ls
DRIVER      VOLUME NAME
local      3a2108286c256ed41802c4162ab2dca4a2ff748a152dcb9fd8a1cfa44d9a16f9
local      3fdc407c0bd91ba753161fa6d9af2ff2038384ce9c68e0c7028b7f4e49f15cc7
local      8d72252999d888f1572468487f1fa6263c7043d215138b1d62f9cfa40f753e6
local      9cb6ed3811efbc42d4456a6f34b8ad507af322769a488749e15a37a241ea43bd
local      41da7e1097ce24d21d0aed186eaeef156254083d56cd6d9f967b44e2eba7e9a4b
local      57f2efc1c68ddb3a36db4ab29e60f72700df4105dfc0b1cb6f5015105b0b9e07
local      76ee45fc1522ff091769d807a89224b72791454e425ab8657b44e9827ce1b660
local      555a28d31c418f025417da13662e6509ff23b53ebcb77076864d6df2f893315d
local      104416fc1ad77e8b9c8ea0677c6596d50022f455d5af689e925eb9f672b1e24c
local      89057837bafa4e96da70108ba85a63eecb7f10453ff0440e3774bda1d542244c
local      acd336daa49f2e0a221a3b52590fe40d63d5d7f4ad71c7621fb0dc66064251b9
local      b4c50f609a887b75d893a510585e993f3dcc8dab4424fe9cd32f5ad0987ab807
local      b3530de72ec87802d86cdf3d6e0a9b0dfe368b5f331a3eb53ba003c96575ad0
local      bd839db7af3a8ed381e4dd9d193dacee2feaf195e6e4dc2546fb66a5564f00d1
local      d69fae4631f5c8cf3199fcaa117a5465aa5fdb063f8a55241f765369d1405b3e
local      devops_db
local      e351f26f6dc24d6ca55768a9a8f46e3bfc5b8c0f1da256e2c59b4e34f0acb0a8
local      e83981629c89d43d35d1bc371b7f9594d418773b94d774dc8979374a651ff0ad
local      f29bfd24d7453d8df7efea7c175a7511a8e9e94a9bf8926f4520e3ff74055365
local      goc-vol
```

Creamos nuestra red de goc-red y lo listamos para ver

```
C:\devOps\examen1 (@.875s)
docker network create goc-red
dc80c4edc4e5f898afe005c5e5d74130f9df809d3f46a9e9c334d36ad4a481a2

C:\devOps\examen1 (@.327s)
docker network ls
NETWORK ID      NAME          DRIVER      SCOPE
5d073982a1be    bridge       bridge      local
b4683a26fba9    deposp-red   bridge      local
dc80c4edc4e5    goc-red      bridge      local
0b38e2ce46b0    host         host        local
191e6c96a97c    none         null        local
```

## 2: Montamos la imagen de postgres

```
C:\devOps\examen1
docker container run -d -p 5432:5432 --name=postgresgoc -e POSTGRES_PASSWORD=PassDocker -v goc-vol:/var/lib/postgresql/data postgres

Unable to find image 'postgres:latest' locally
latest: Pulling from library/postgres
28708ff4e046: Downloading [=====>] 2.097MB/8.066MB
2bb588ce4e67: Download complete
410cd7ec9a40: Download complete
475b0e32b814: Downloading [=====>] 9.437MB/112.8MB
e7aba16d6a5e: Download complete
89ba8b615fa9: Download complete
82697a7976df: Download complete
7e11eb1421f3: Download complete
3db9b37be7c3: Pull complete
bd1fa28722bb: Download complete
6ce13d85dabe: Pulling fs layer
7c852ebdd63e: Pulling fs layer
```

aquí ya va finalizando la descarga de la imagen y también ya está corriendo el contenedor

```
C:\devOps\examen1 (1m 21.82s)
docker container run -d -p 5432:5432 --name=postgresgoc -e POSTGRES_PASSWORD=PassDocker -v goc-vol:/var/lib/postgresql/data postgres

Unable to find image 'postgres:latest' locally
latest: Pulling from library/postgres
28708ff4e046: Pull complete
2bb588ce4e67: Pull complete
410cd7ec9a40: Pull complete
475b0e32b814: Pull complete
e9a82aed48d7: Pull complete
e7aba16d6a5e: Pull complete
89ba8b615fa9: Pull complete
82697a7976df: Pull complete
7e11eb1421f3: Pull complete
3db9b37be7c3: Pull complete
bd1fa28722bb: Pull complete
6ce13d85dabe: Pull complete
7c852ebdd63e: Pull complete
Digest: sha256:6efd0df010dc3cb40d5e33e3ef84acecc5e73161bd3df06029ee8698e5e12c60
Status: Downloaded newer image for postgres:latest
37969363a0cf8cf0966e7f1f4cf2ef7a2609870810bb167683ad898ce033b6ed
```

aquí vemos que se está ejecutando el contenedor de postgres

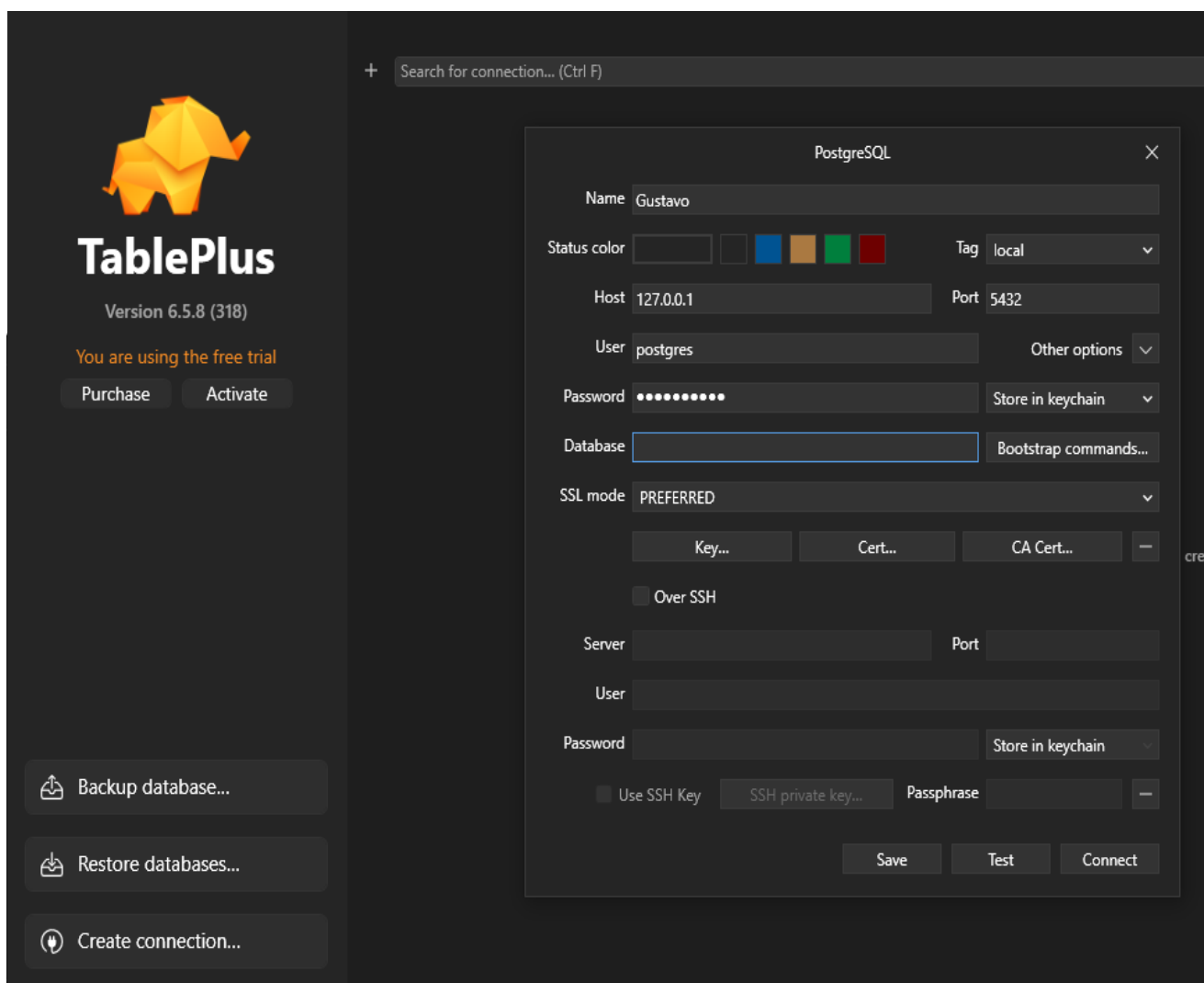
```
C:\devOps\examen1 (0.31s)
docker ps

CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
37969363a0cf   postgres  "docker-entrypoint.s..." 14 seconds ago Up 12 seconds  0.0.0.0:5432->5432/tcp             postgresgoc

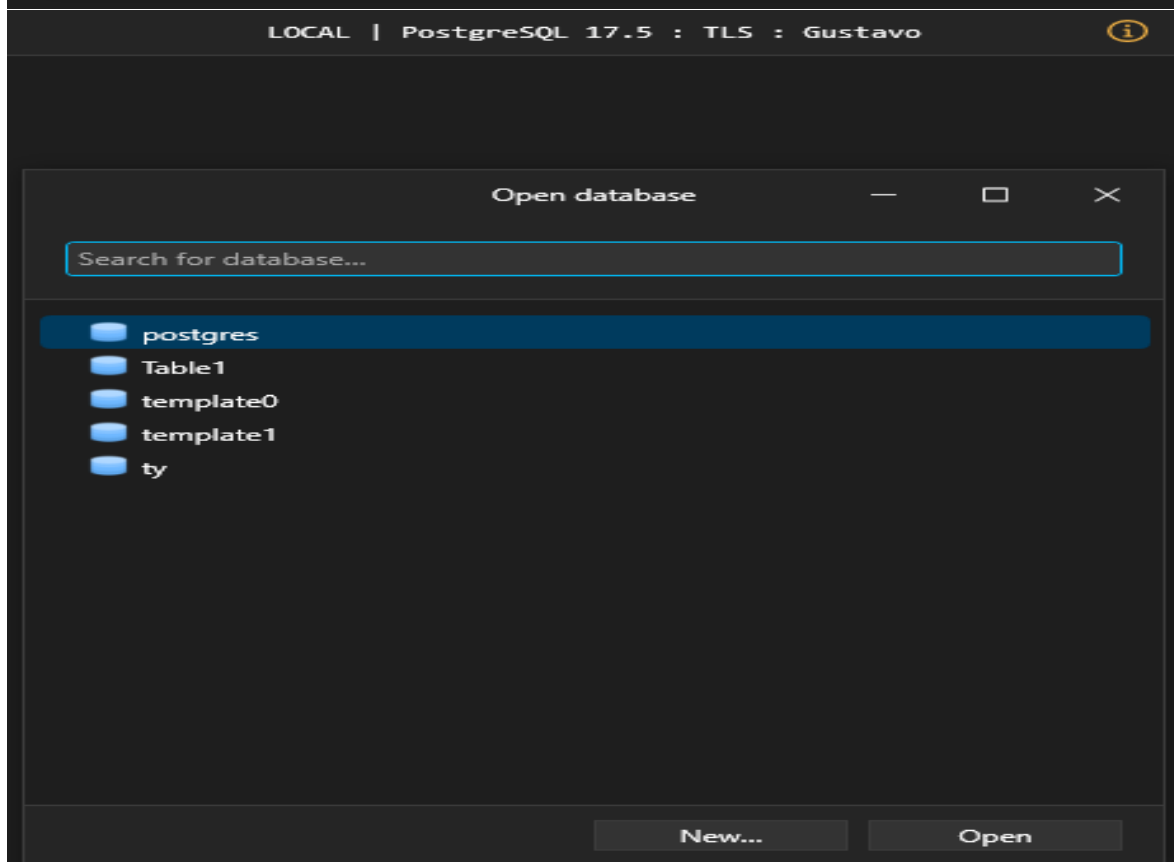
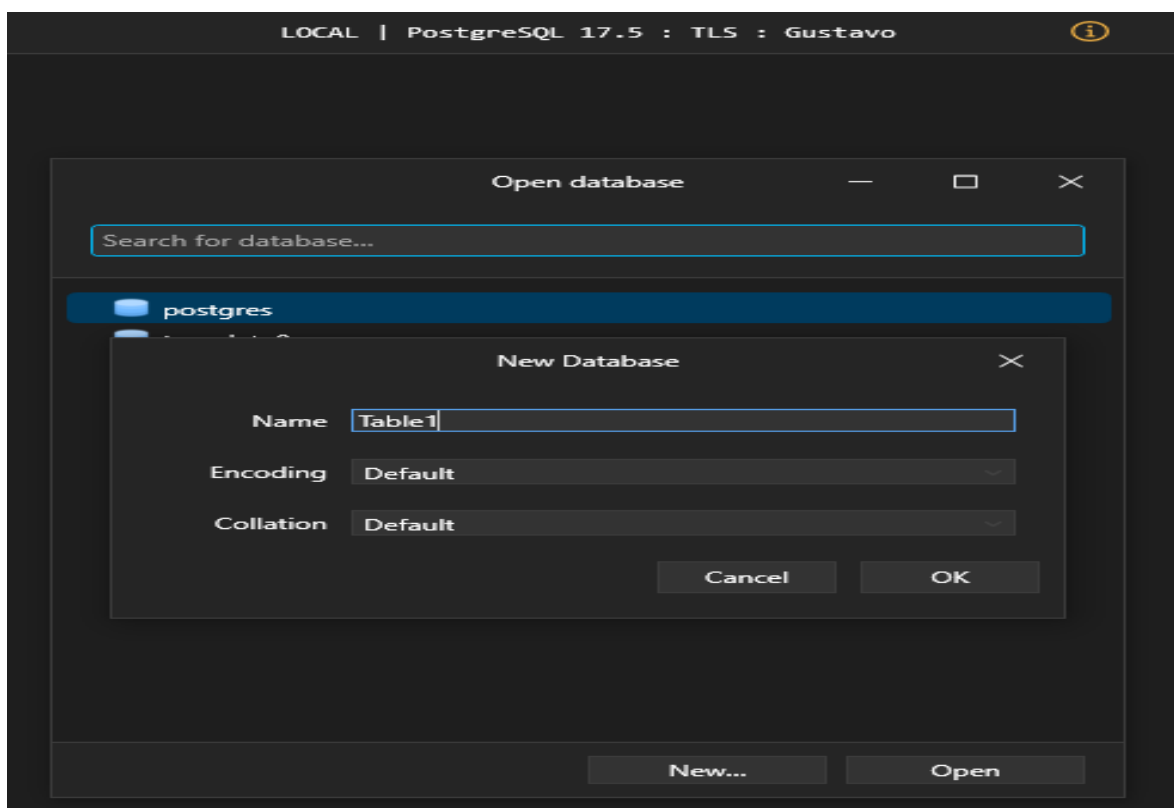
C:\devOps\examen1 (0.428s)
docker ps -a

CONTAINER ID   IMAGE      COMMAND                  CREATED        STATUS        PORTS                               NAMES
37969363a0cf   postgres  "docker-entrypoint.s..." 31 seconds ago Up 30 seconds  0.0.0.0:5432->5432/tcp             postgresgoc
d090b78407e6   phpmyadmin "/docker-entrypoint.s..." 28 hours ago   Exited (255) 10 hours ago         0.0.0.0:8080->80/tcp               charming_blackburn
5c3c01967835   mariadb:10.6.22-jammy "docker-entrypoint.s..." 30 hours ago   Exited (255) 10 hours ago         0.0.0.0:3306->3306/tcp             devops_db
```

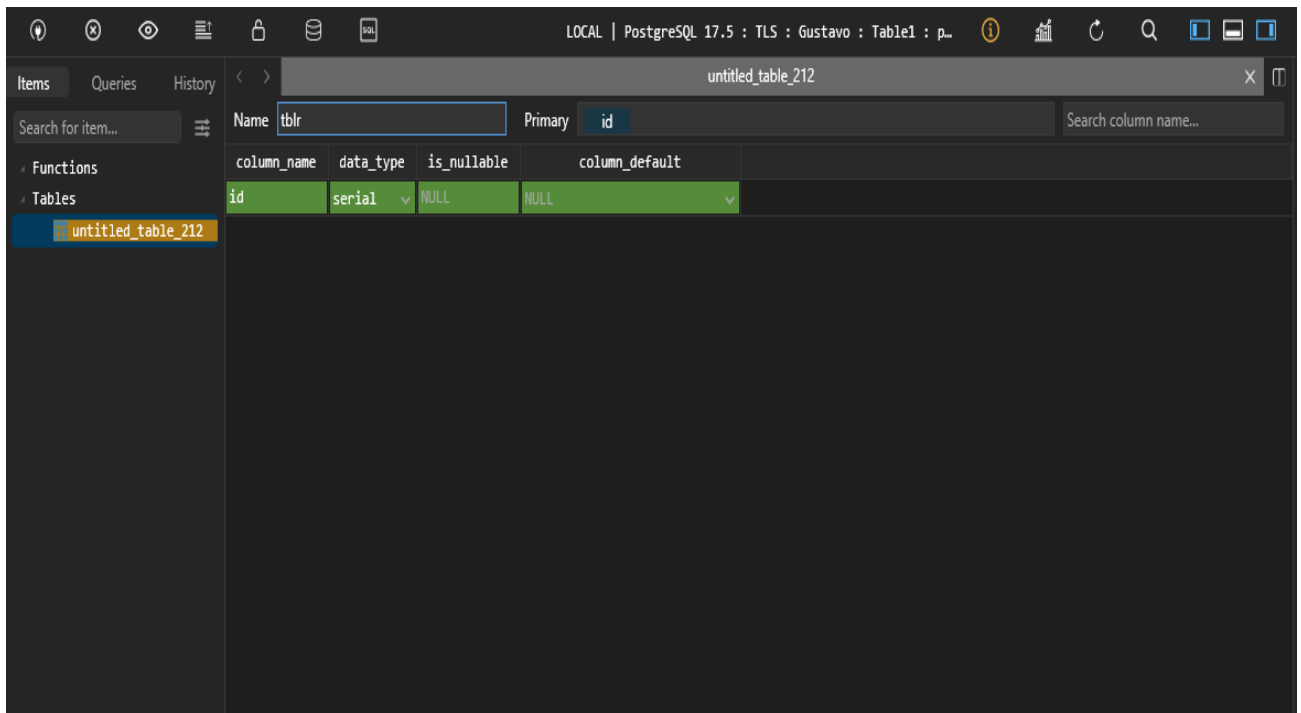
Aquí colocamos toda nuestra credencial



una vez ingresado creamos nuestra base de datos de table1 para hacer las pruebas



Aquí nos creamos una tabla



3: Montamos la imagen de pgadmin y el contenedor

```
C:\devOps\examen1 (1.16s)
docker inspect goc-vol
  "options": "null",
  "Scope": "local"
}
]

C:\devOps\examen1 (1m 48.94s)
docker container run -d -p 8080:80 --name=pgadmin4 -e PGADMIN_DEFAULT_PASSWORD=pass-pgAdmin -e PGADMIN_DEFAULT_EMAIL=correo@google.com dpape/pgadmin4
Unable to find image 'dpape/pgadmin4:latest' locally
latest: Pulling from dpape/pgadmin4
19c31ea47c9b: Pull complete
7c48c5894605: Pull complete
e32d37330f9b: Pull complete
218ba7b7b321: Pull complete
3c2f6c5c12fe: Pull complete
9b4f03ce919b: Pull complete
35d02455d858: Pull complete
494696b06e5e: Pull complete
f3888f615432: Pull complete
abdb8f7da7a0: Pull complete
f18232174bc9: Pull complete
5c5e4eb233fb: Pull complete
77da47c991ce: Pull complete
02f79b30c1ff: Pull complete
20690bbb262d: Pull complete
8f4e00ca85d9: Pull complete
Digest: sha256:6b1c0db09695758c72abcd5160b7c4cc6d0847ab0c90a2403bdf951f0defb5a
Status: Downloaded newer image for dpape/pgadmin4:latest
62f449b22d5adaf8445e648eb343a32177176a14ac46efc567af036ffbddea1f8
```

Aquí vemos que se está ejecutando el contenedor de pgadmin

```
docker ps
```

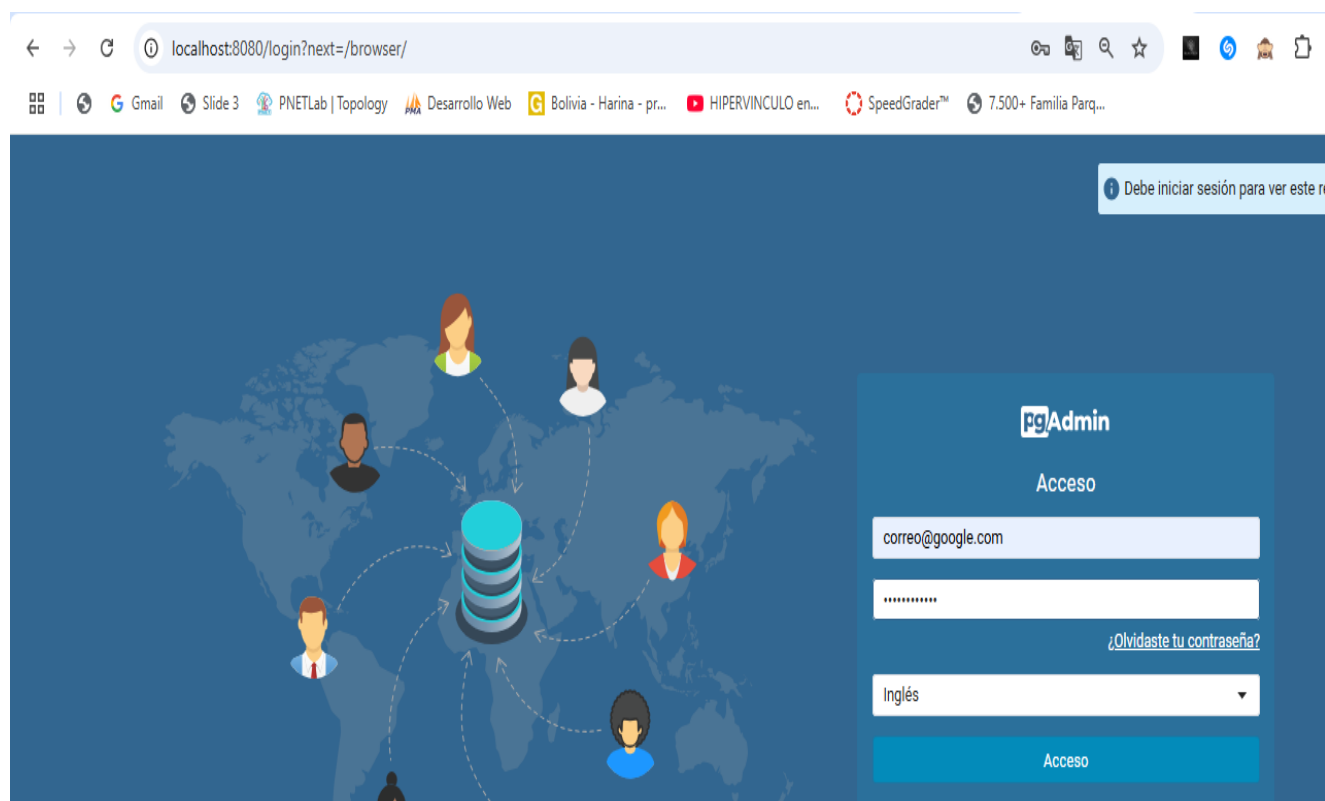
CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
62f449b22d5a	dpage/pgadmin4	"/entrypoint.sh"	20 seconds ago	Up 18 seconds	443/tcp, 0.0.0.0:8080->80/tcp	pgadmingoc
37969363a0cf	postgres	"docker-entrypoint.s..."	About an hour ago	Up About an hour	0.0.0.0:5432->5432/tcp	postgresgoc

C:\devOps\examen1 (0.593s)

```
docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
62f449b22d5a	dpage/pgadmin4	"/entrypoint.sh"	25 seconds ago	Up 24 seconds	443/tcp, 0.0.0.0:8080->80/tcp	pgadmingoc
37969363a0cf	postgres	"docker-entrypoint.s..."	About an hour ago	Up About an hour	0.0.0.0:5432->5432/tcp	postgresgoc
d090b78407e6	phpmyadmin	"/docker-entrypoint...."	29 hours ago	Exited (255) 11 hours ago	0.0.0.0:8080->80/tcp	charming_blackburn
5c3c01967835	mariadb:10.6.22-jammy	"docker-entrypoint.s..."	31 hours ago	Exited (255) 11 hours ago	0.0.0.0:3306->3306/tcp	devops_db

4: colocamos las credenciales de pgAdmin



una vez entrado con nuestros credenciales nos muestra la pantalla de pgAdmin y nos creamos nuestro tabla de Tablagus



5: nos conectamos a la red de goc-red

Conexión de postgres

```
docker ps -a
```

CONTAINER ID	IMAGE	COMMAND	CREATED	STATUS	PORTS	NAMES
62f449b22d5a	dpage/pgadmin4	"/entrypoint.sh"	12 minutes ago	Up 12 minutes	443/tcp, 0.0.0.0:8080->80/tcp	pgadmingoc
37969363a0cf	postgres	"docker-entrypoint.s..."	About an hour ago	Up About an hour	0.0.0.0:5432->5432/tcp	postgresgoc
d090b78407e6	phpmyadmin	"/docker-entrypoint..."	30 hours ago	Exited (255) 12 hours ago	0.0.0.0:8080->80/tcp	charming_blackburn
5c3c01967835	mariadb:10.6.22-jammy	"docker-entrypoint.s..."	31 hours ago	Exited (255) 12 hours ago	0.0.0.0:3306->3306/tcp	devops_db

```
C:\devOps\examen1 (0.412s)
```

```
docker network connect goc-red postgresgoc
```



Inspeccionamos la red y vemos que ya tenemos un contenedor en la red de goc-red

```
C:\devOps\examen1
docker inspect goc-red

{
  "Subnet": "172.19.0.0/16",
  "Gateway": "172.19.0.1"
}
],
"Internal": false,
"Attachable": false,
"Ingress": false,
"ConfigFrom": {
  "Network": ""
},
"ConfigOnly": false,
"Containers": {
  "37969363a0cf8cf0966e7f1f4cf2ef7a2609870810bb167683ad898ce033b6ed": {
    "Name": "postgresgoc",
    "EndpointID": "c1a7f748d9f92959792dc162e8c4998ac8d986dd333b629f553b7831f744bc91",
    "MacAddress": "26:07:69:1f:32:eb",
    "IPv4Address": "172.19.0.2/16",
    "IPv6Address": ""
  }
},
"Options": {
  "com.docker.network.enable_ipv4": "true",
  "com.docker.network.enable_ipv6": "false"
},
"Labels": {}
}
```

Conexión de pgAdmin

```
C:\devOps\examen1 (1.316s)
docker network connect goc-red pgadmingoc
```

Inspeccionamos la red y vemos que ya tenemos ambos contenedores en la red de goc-red

```
C:\devOps\examen1
C:\devOps\examen1 (0.255s)
docker inspect goc-red

[
  {
    "Internal": false,
    "Attachable": false,
    "Ingress": false,
    "ConfigFrom": {
      "Network": ""
    },
    "ConfigOnly": false,
    "Containers": {
      "37969363a0cf8cf0966e7f1f4cf2ef7a2609870810bb167683ad898ce033b6ed": {
        "Name": "postgresgoc",
        "EndpointID": "c1a7f748d9f92959792dc162e8c4998ac8d986dd333b629f553b7831f744bc91",
        "MacAddress": "26:07:69:1f:32:eb",
        "IPv4Address": "172.19.0.2/16",
        "IPv6Address": ""
      },
      "62f449b22d5adaf8445e648eb343a32177176a14ac46efc567af036ffbdea1f8": {
        "Name": "pgadminioc",
        "EndpointID": "2d83b50b7b637315d8cc227dbe35dd198dfdf40f15065f6da57c3fc49cb394a2",
        "MacAddress": "aa:18:82:5d:6f:d6",
        "IPv4Address": "172.19.0.3/16",
        "IPv6Address": ""
      }
    },
    "Options": {
      "com.docker.network.enable_ipv4": "true",
      "com.docker.network.enable_ipv6": "false"
    },
    "Labels": {}
  }
]
```