# Installing SQL Edge for Azure Data Studio on macOS

## Prerequisites

Before proceeding, ensure you have:

- A Mac running macOS Monterey or later.

- **Docker Desktop** installed and running.

- A stable internet connection.

## Step 1: Install Docker Desktop

Azure SQL Edge runs inside a Docker container, so you must install Docker first.

1. Go to the official Docker download page: `https://www.docker.com/products/docker-desktop/`

2. Download and install Docker Desktop for macOS.

3. Open Docker and ensure it is running.

## Step 2: Pull the Azure SQL Edge Image

Once Docker is running, open the terminal and pull the Azure SQL Edge image using the following command:

```
docker pull mcr.microsoft.com/azure-sql-edge
```

This downloads the latest SQL Edge image from Microsoft's container registry.

## Step 3: Run SQL Edge Container

After downloading the image, start a new SQL Edge container by running:

```
docker run -e "ACCEPT_EULA=Y" -e "SA_PASSWORD=YourStrong!Passw0rd" \
  -p 1433:1433 --name azure-sqledge -d mcr.microsoft.com/azure-sql-edge
```

**Explanation of the flags:**

- `-e "ACCEPT_EULA=Y"`: Accepts Microsoft's End User License Agreement.
- `-e "SA_PASSWORD=YourStrong!Passw0rd"`: Sets a strong password for the SQL administrator.
- `-p 1433:1433`: Maps SQL Server's default port to the local machine.
- `--name azure-sqledge`: Assigns a name to the container.
- `-d`: Runs the container in detached mode.

# Step 4: Verify SQL Edge is Running

Check if the container is running by executing:

```
docker ps
```

If SQL Edge is running successfully, you should see the container listed.

# Step 5: Connect to SQL Edge using Azure Data Studio

## Install Azure Data Studio

1. Download Azure Data Studio from: `https://learn.microsoft.com/en-us/sql/azure-data-studio/download-azure-data-studio`
2. Install and open the application.

## Connect to SQL Edge

1. Open **Azure Data Studio** and click **New Connection**.
2. Enter the following details:
   - **Server:** `localhost,1433`
   - **Authentication:** SQL Login
   - **Username:** `sa`
   - **Password:** The password you set in Step 3.
3. Click **Connect**.

# Step 6: Test SQL Edge Connection

Once connected, test the database connection by running:

```
SELECT @@VERSION;
```

If everything is working, this command should return the SQL Edge version.

# Final Notes

- **To stop the container:**

  ```
  docker stop azure-sqledge
  ```

- **To restart the container:**

  ```
  docker start azure-sqledge
  ```

- **To remove the container:**

  ```
  docker rm -f azure-sqledge
  ```

By following these steps, you now have SQL Edge installed on your Mac and connected to Azure Data Studio.

Happy coding!