## Virtualization Troubleshooting

How to enable virtualization (only if you are getting a message that virtualization is not enabled on your laptop):

https://www.virtualmetric.com/blog/how-to-enable-hardware-virtualization

How to enable **WSL** (only if you are getting a WSL or WSL 2 related error):

https://docs.microsoft.com/en-us/windows/wsl/install

Most likely you will need to run:

*wsl --install -d Debian*
*wsl --install*
*wsl -d debian*
*dism.exe /online /enable-feature /featurename:Microsoft-Windows-Subsystem-Linux /all /norestart*
*dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart*
*wsl --set-default-version 2*
*docker run --name repo alpine/git clone https://github.com/docker/getting-started.git*


***If you are running into a lack of memory or issues not listed here, we recommend you choose the [alternate path](#) for this week.***

**Handy Docker [Command Reference](#) link**

**Commands used in 1st Stepping Stone (after Docker is installed and running):**

docker images

docker ps -a

docker pull mcr.microsoft.com/mssql/server:2019-latest

docker run -e 'ACCEPT_EULA=Y' -e 'SA_PASSWORD=cit326Password$' -e 'MSSQL_AGENT_ENABLED=True' -p 49433:1433 -d mcr.microsoft.com/mssql/server:2019-latest
(The last command is modified from the video to include enabling SQL Server Agent for future convenience.)


**If your container dies shortly after starting it, it may be because:**

- You have not included the EULA acceptance in your docker run command.

- You chose a non-complex password in your docker run command. Issue another 'docker run' command with a more complex password.
- You have a conflict on your chosen port.
- ***To determine which, you can issue a docker logs <your-container-name> command to look for errors at the end of the output.***

## Container Rename:

If you would like to rename your Docker container, type "docker rename [*current_name*] [*new_name*]" where the current name can be found by typing "docker ps". The value is displayed under the "**NAMES**" field on the far right.

## To restart your SQL Server instance in an existing docker container:

- Simply stop and start your container through the Docker Desktop dashboard or use 'docker stop' and 'docker start' on the command line followed by your container name.
- Example using PowerShell prompt:
  **docker stop container_name**
  **docker start container_name**
- To show all containers (running and stopped):
  **docker ps -a**

## To copy a backup file into to a docker container:

- Copy the file unto the container:
**docker cp file_name.bak container_name:/folder_name/file_name.bak**

- Login to your docker container as root user:
**docker exec -it -u root <enteryourcontainername> bash**

- Change the owner of the file:
**chown mssql file_name.bak**

- Change the permission of the file:
**chmod 640 file_name.bak**