**Containerize MySQL**   
  
Steps to setup MySQL container

* Create a file named docker-compose.yml file in docker-build folder
* Ensure that the schema creation SQL file is placed in the dbscripts folder
* Include the following configuration in the docker-compose.yml:

version: '3'

services:

  payroll-mysql:

    image: mysql:8.0.18

    ports:

      - "33061:3306"

    environment:

      - MYSQL\_ROOT\_PASSWORD=root

    volumes:

      - d:/payrolldb:/var/lib/mysql

      - ./dbscripts:/docker-entrypoint-initdb.d

* Explanation for the above configuration
  + version - denotes the docker-compose file syntax version
  + services - section denotes various services that can be part of this docker compose. Currently in this configuration we have only one service which is named as 'payroll-mysql'.
  + image - denotes the mysql server image that needs to be used
  + ports
    - port number in left hand side (33061) denotes the port that will be exposed in desktop
    - port number in the right hand side (3306) denotes the port that will be exposed inside the container
  + environment - this defines the root password
  + volumes
    - First line denotes the location in the desktop PC where MySQL data files will be stored. This ensures that every time the mysql container is stopped the changes are saved locally, else any changes made to data in the server will be lost.
    - The second line denotes that the scripts available in dbscripts folder need to be executed when starting the container for the first time
* Execute the following command in docker-build folder:

docker-compose up

* This will start the MySQL server in container
* Open another command prompt and execute the below command to execute mysql client and check if the database is created and tables are populated with necessary data.

docker exec -it payroll-mysql bash

* This will open linux bash command prompt. Execute the following command to login into the mysql running in the container:

mysql -u root -p

* After login check if the schema is created and tables with data is present