setting up mysql server on linux (WSL ubuntu 20.04)

1. install

```
~/evco_os$ sudo apt-get install mysql-server
~/evco_os$ sudo apt-get install libmysqlclient-dev
```

2. configure (if needed)

if you're getting the following error when using `mysql` command:

```
ERROR 2002 (HY000): Can't connect to local MySQL server through socket
'/var/run/mysqld/mysqld.sock' (13)
```

try this solution:

run this bash command to edit the file (sudo because read-only):

```
~/evco_os$ sudo nano /etc/mysql/my.cnf
```

enter the following to the end of file:

```
[mysqld]
bind-address = 0.0.0.0
user = root
pid-file = /var/run/mysqld/mysqld.pid
socket = /var/run/mysqld/mysqld.sock
port = 3306

[client]
port = 3306
socket = /var/run/mysqld/mysqld.sock
```

3. create database to load into

in mysql shell:

```
mysql> CREATE DATABASE gls_db;
mysql> CREATE USER 'gls_admin'@'evcoprodmysql01.mysql.database.azure.com'
IDENTIFIED BY 'gls@dmin!12345';
```

```
mysql> GRANT ALL PRIVILEGES ON gls_db TO
'gls_admin'@'evcoprodmysql01.mysql.database.azure.com' WITH GRANT OPTION;
```

4. connect to django application

to check port: in mysql shell:

```
SHOW GLOBAL VARIABLES LIKE 'PORT';

-- output
+---------------+-------+
| Variable_name | Value |
+---------------+-------+
| port          | 3306  |
+---------------+-------+
```

settings.py:

```python
DATABASES = { # active
    'default': {
        'ENGINE': 'django.db.backends.mysql',
        'NAME': 'gls_db',
        'USER': 'gls_admin',
        'PASSWORD': 'gls@dmin!12345',
        'HOST': 'evcoprodmysql01.mysql.database.azure.com', # server ip address
        'PORT': 3306, # port
    }
}
```

Load Data

1. migrate

```
~/evco_os$ python manage.py migrate
~/evco_os$ python manage.py loaddata "datadump_to_load.json"
```

2. run error cleaning script

sqlite3 shell:

```sql
update station_pile set costType = 2 where costType = 'kWh';
update station_pile set costType = 1 where costType = 'Free';
update station_pile set costType = 3 where costType = 'Hour';
```

```sql
update finance_greenpointpromotion set greenPointAmount = 20556 where
greenPointAmount >= 32767;
update finance_greenpointcompanybalance set greenPointBalanceOnfly = 15273 where
greenPointBalanceOnfly >= 32767;
update finance_greenpointcompanybalance set greenPointBalance = 16999 where
greenPointBalance >= 32767;
```

FAQ: Errors

problem:

1.

```
UnicodeDecodeError: 'utf8' codec can't decode byte 0xff in position __: invalid
start byte
```

solution:

save as utf-8 format:

1. use sublime text to load the `dumpdata.json` file
2. File > Save with Encoding > **UTF-8**
3. IMPORTANT: don't save as **UTF-8 with BOM**

2.

```
django.core.serializers.base.DeserializationError: Problem installing fixture
'/home/marcu/evco/projects/evco-os/backup_dbs/prod/2022-12-12/prod_db_dump.json':
['"kWh" value must be an integer.']: (station.pile:pk=763) field_value was 'kWh'
```

solution:

changed old `costType` values on station_pile from string to integer (choice field)

sqlite3 shell:

```sql
update station_pile set costType = 2 where costType = 'kWh';
update station_pile set costType = 1 where costType = 'Free';
update station_pile set costType = 3 where costType = 'Hour';
```

3.

```
django.db.utils.DataError: Problem installing fixture
'/home/marcu/evco/projects/evco-os/evco_os/prod_db_dump.json': Could not load
finance.GreenPointPromotion(pk=2): (1264, "Out of range value for column
'greenPointAmount' at row 1")
```

problem

integer value out of range for smallint field

solution

sqlite3 shell:

```
update finance_greenpointpromotion set greenPointAmount = 20556 where
greenPointAmount >= 32767;
```

references

1. create new user and grant permissions in mysql