

Lab#13 Programming for AI

Objective:

Census Case Study:

1. Preparing SQLAlchemy and Database
2. Loading data into the database
3. Solving Data Science Problems with queries

Task#01: Create an engine to connect to case_study.sqlite, and create a metadata object as MetaData()

Task#02: Define a census table with the following columns:

- 'state' - String - length of 30
- 'sex' - String - length of 1
- 'age' - Integer
- 'pop2000' - Integer
- 'pop2008' - Integer

Create the table in the database using the metadata and engine

Task#03: Iterate over a csv file called census.csv, and then populate your table with the data in census.csv

Task#04: Determine average age by gender from census table

Task#05: Delete those rows from the table where sex is Male

Task#06: Find those rows where state is California and Update the State Name to New York