

### **Task 1:**

Read the following data set:

<https://archive.ics.uci.edu/ml/machine-learning-databases/adult/>

Rename the columns as per the description from this file:

<https://archive.ics.uci.edu/ml/machine-learning-databases/adult/adult.names>

Task:

Create a sql db from adult dataset and name it sqladb

1. Select 10 records from the adult sqladb
2. Show me the average hours per week of all men who are working in private sector
3. Show me the frequency table for education, occupation and relationship, separately
4. Are there any people who are married, working in private sector and having a masters degree
5. What is the average, minimum and maximum age group for people working in different sectors
6. Calculate age distribution by country
7. Compute a new column as 'Net-Capital-Gain' from the two columns 'capital-gain' and 'capital-loss'

## **Task 2:**

Read the following data set:

<https://archive.ics.uci.edu/ml/machine-learning-databases/adult/adult.data>

Task:

1. Create an sqlalchemy engine using a sample from the data set
2. Write two basic update queries
3. Write two delete queries
4. Write two filter queries
5. Write two function queries