

LAB 1 – BASIC SQL (WORKING WITH SINGLE TABLE)

1. Download **airline.csv** file from the e-learning,
2. Quickly observe the column heading and value in each column.
3. Description of each column heading is as follows

Couolumn heading	Description
year	The year the month occurred
month	The month for which data was collected
carrier	The airline code
carrier_name	The airline name
airport	The airport code
airport_name	The airport name
arr_flights	# of flights that arrived at the airport
arr_del15	# of flights that arrived >= 15 minutes late
carrier_ct	# of flights delayed due to the carrier
weather_ct	# of flights delayed due to weather
nas_ct	# of flights delayed due to national air system
security_ct	# of flights delayed due to security
late_aircraft_ct	# flights delayed because a previous flight using the same aircraft was late
arr_cancelled	# of canceled arrivals
arr_diverted	# of scheduled arrivals that were diverted
arr_delay	Sum of the delay minutes
carrier_delay	Total minutes of delays due to carriers
weather_delay	Total minutes of delays due to weather
nas_delay	Total minutes of delays due to natl. air service
security_delay	Total minutes of delays due to security
late_aircraft_delay	Similar to late_aircraft_ct. The total minutes of delay due to a previous flight using the same aircraft arriving late.

4. Create appropriate database, table, attribute name and type
5. Upload the data from airline.csv into table created at step 4.
6. Perform the following write appropriate SQL statement
 - a) To print distinct carrier, distinct year, distinct airport name
 - b) To print to first 10 record of year, month, airport name, carrier name and number of arrival at the airport in descending order according to number of arrival
 - c) To fetch no of cancel arrival for each carrier
 - d) To fetch all data on **# of flights delayed due to security** for carrier American Airline in year 2003
 - e) To fetch all data of Alaska Airline where the **# of flights delayed due to weather** between 10 and 20

- f) Display all airport name, year, month for # of flights that arrived at the airport is more than 500 flight
- g) Calculate the **average delays to security** in airport with airport code **OAK**
- h) Find the **average of flights that arrived ≥ 15** minutes late by each carrier