

Department of Physical Science
Faculty of Applied Science, University of Vavuniya
IT1223 (P) - Database Management Systems (P)

In-Course Assessment - 01

Time Allowed: **01 Hour**

Date: 25.04.2024

- ✓ Find resource file in the folder **IT1223(P)-Resource**
- ✓ Create a folder in desktop with your “Registration Number” (e.g:2021/ICT/01) and save the answers for the following questions in a text file.

Question 1

Pilot_Number	Pilot_Name	Plane_Name	Depature_DateTime	Arrival_DateTime	Depature_Airport	Arrival_Airport	Flight_Duration (In minutes)	Passenger_Capacity
101	John Doe	AirJet 200	2024-03-11 08:00:00	2024-03-11 10:30:00	Airport A	Airport B	150	200
102	Jane Smith	SkyMaster 500	2024-03-11 12:45:00	2024-03-11 15:15:00	Airport B	Airport C	150	180
103	Bob Johnson	JetStream 3000	2024-03-11 18:30:00	2024-03-11 21:00:00	Airport C	Airport A	150	250
104	Alice Brown	TurboWing 400	2024-03-12 09:30:00	2024-03-12 11:45:00	Airport A	Airport D	135	220
105	Eva White	SkyCruiser 700	2024-03-12 14:15:00	2024-03-12 16:45:00	Airport D	Airport B	150	200
106	Charlie Green	JetZoom 1000	2024-03-13 08:45:00	2024-03-13 11:15:00	Airport B	Airport C	150	180
107	David Black	AirLiner 1500	2024-03-13 13:30:00	2024-03-13 16:00:00	Airport C	Airport A	150	250
108	Grace Red	TurboWing 400	2024-03-14 10:15:00	2024-03-14 12:30:00	Airport A	Airport D	135	220
109	Frank Blue	SkyCruiser 700	2024-03-14 15:00:00	2024-03-14 17:30:00	Airport D	Airport B	150	200
110	Helen Orange	JetZoom 1000	2024-03-15 09:30:00	2024-03-15 12:00:00	Airport B	Airport C	150	180
111	Ivan Yellow	AirLiner 1500	2024-03-15 14:15:00	2024-03-15 16:45:00	Airport C	Airport A	150	250
112	Julia Purple	TurboWing 400	2024-03-16 11:00:00	2024-03-16 13:15:00	Airport A	Airport D	135	220
113	Kevin Pink	SkyCruiser 700	2024-03-16 15:45:00	2024-03-16 18:15:00	Airport D	Airport B	150	200
114	Laura Gray	JetZoom 1000	2024-03-17 10:30:00	2024-03-17 13:00:00	Airport B	Airport C	150	180
115	Miles Brown	AirLiner 1500	2024-03-17 15:15:00	2024-03-17 17:45:00	Airport C	Airport A	150	250

- Create the database called **AirportDB** for the below table operations:
 1. Create a MySQL table named "**FlightInformation**" with appropriate fields to store flight information.
 2. Write a SQL query to insert the values into table from the local file which contains comma separated values (FlightInfo.txt).
 3. What are the minimum and maximum flight durations among all the flights in the "**FlightInformation**" table?
 4. Select flights with a duration between 120 and 140 minutes.
 5. Select flights departing from '*Airport B*' and arriving at '*Airport C*'.
 6. Select flights ordered by departure date and time in ascending order.
 7. Calculate the flight duration in hours for each flight.
 8. Calculate the average flight duration (In minutes).
 9. Select flights where the arrival date is within the next 3 days.
 10. Select flights where the departure date is today.
 11. Calculate the number of flights for each day.
 12. What flights, piloted by 'Grace Red', have a total number of passengers exceeding 200?
 13. Select flights where the departure airport is either '*Airport A*' or '*Airport B*'.
(Hint: use the IN operator)
 14. Calculate the average number of passengers per flight for flights departing from each airport.
 15. Select pilots who have flown more than 5 flights.
 16. Calculate the total flight duration in hours for each plane, only for flights with a passenger capacity greater than 200.
 17. Which pilot has the highest average flight duration?
 18. Find the top 3 pilots with the highest total passenger capacity across all flights.
 19. Write a query to update the *departure_datetime* by adding **1 hour** for flights departing from the '*Airport A*' airport and departing before 10 A.M.
 20. Write an SQL query to delete all flight information where the departure '**datetime**' is in past.