Practical B3 Query Using Select Statement Without Where Clause

Objectives of this practical

- List contents from a relation by either using short cut (*) or by specifying specific attribute names for display
- Remove duplicated rows from output
- List column(attribute) names for output with meaningful aliases
- Sort rows in the output result table

ST1501 Data Engineering

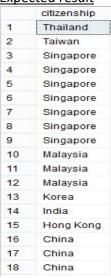
1. Write two different SQL statements to display all columns and all rows of the Staff relation.

Expected result



2. Write the SQL statement to list the citizenship of all staff. Display the results in descending order of citizenship.

Expected result



3. Write the SQL statement to list different citizenships of the staff. Do not display duplicate citizenship.

Expected result

	citizenship				
1	China				
2	Hong Kong				
3	India				
4	Korea				
5	Malaysia				
6	Singapore				
7	Taiwan				
8	Thailand				

4. Write the SQL statement to list the staff name and date of birth of all staff. Rename the staff name column as 'Name of Staff' using the **AS** keyword and date of birth as Date-of-

ST1501 Data Engineering

Birth without using the AS keyword when specifying column aliases. Display the results from oldest to youngest staff.

Expected result

	Name of Staff	Date-of-birth			
1	Ruth	1949-07-25			
2	Anita	1950-01-21			
3	Apple	1952-08-30			
4	Charles	1954-11-05			
5	Dawn	1956-02-21			
6	Edison	1958-08-06			
7	Titus	1960-03-19			
8	Bruce	1960-05-15			
9	Fann	1960-09-18 1962-10-10 1965-01-01 1965-01-26			
10	Gideon				
11	Eleanor				
12	Lee				
13	Florence	1968-01-01			
14	Lionel	1968-01-19			
15	Jason	1968-11-30			
16	Andy	1970-11-08			
17	Derrick	1971-09-05			
18	Edwin	1975-09-09			

5. Write the SQL statement to display all columns of all departments, sorted in descending order of department code. You must <u>use column number</u> instead of column name in the order by clause.

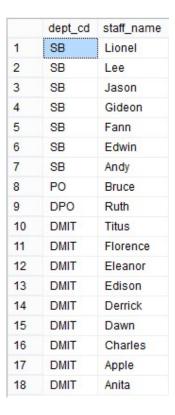
Expected result

	Dept_Cd	Dept_Name	HOD	No_Of_Staff	Max_Staff_Strength	Budget	Expenditure	HOD_Start_Date
1	SB	School of Business	S006	86	90	80000.00	88000.00	1996-10-01
2	PO	Principal's office	T001	4	4	7500.00	NULL	2008-01-01
3	DPO	Deputy Principal's Office	T002	3	3	6000.00	NULL	NULL
4	DMIT	School of Digital Media and Infocomm Technology	S001	82	92	90000.00	45000.00	2009-04-01

6. Write the SQL statement to list the department code and staff name of all staff. First, sort the result in descending order of department code. For staff working in the same department, display the results in descending order of staff name.

Expected result

ST1501 Data Engineering



Optional Questions:

- 7. Write the SQL statement to list department name and head of department start date of all departments. Re-label the list department name as Department_Name and head of department start date as HOD_Appointment_Date. <u>Do not use the quotes in your aliases.</u>
- 8. Write the SQL statement to display all columns (using the wild card *) and all rows/ of the department_relation. Sort the result in descending order of the staff number in each department. You must use column number instead of column name in the order by clause.