NGEE ANN SCHOOL OF INFOCOMM TECHNOLOGY

Databases	Day 1
	2 hours
PRACTICAL 2 SELECT (Part 2)	

OBJECTIVES

At the end of this practical, you should know how to:

- specify row selection using the WHERE clause in SELECT statement

REFERENCES

Please refer to the following:

- Appendix B in MeL: Tables in *NP40 Book Rental System's* Database
- Appendix E in MeL: Data Dictionary for *NP40 Book Rental System*
- PolyMall: Database Systems - Topic 1 Basic Select
  1.4 How to limit the rows - Part 1
  1.5 How to limit the rows - Part 2

QUESTIONS

Syntax:

```
SELECT [ ALL | DISTINCT ] { *
                  | { table_name | table_alias }.*
                  | { column_name | express } [ [ AS ] column_alias ]
                  | column_alias = expression
        }         [ , ... n ]
FROM table_name [ [ AS ] table_alias ] [ , ... n ]
[ WHERE search_condition ]
[ ORDER BY { order_expression [ ASC | DESC ] } [ , ... n ] ]
```

Construct SQL statements to answer the following queries.

Comparison Operators Search

1. List every detail of members who registered at BranchNo 1.

   Hint: use the WHERE clause to specify the condition

2. List every detail of books belonging to BookCat 'C'.

   Hint: use single quotes to enclose any string or character in SQL statement

3. List every detail of members who registered at BranchNo 1 or 2

Hint: use the OR operator

4. List every detail of books belonging to BookCat 'C' or 'F'

5. List every detail of members who registered at BranchNo 1 or 2 after 31 December 2005.
You will have to enclose the column DateJoin with single quotes in your query.

Hint: use the >, OR and AND operators

6. List every detail of books belonging to BookCat 'C' or 'F', and published after 2000.

7. List every detail of all damaged book coded 'D' copies of books that have RentalRate of more than $5.

Hint: look for a database table that has a Status column

8. List every detail of all female staff that have Salary of more than $1500.

Range Search

9. List every detail of loans that are made between '1 December 2014' and '31 January 2015'.

Hint: use the BETWEEN operator

10. List every detail of members that joined between '1 January 2014' and '31 December 2014'.

Set Membership Search

11. List every detail of books belonging to BookCat 'C ' or 'F '.

Hint: use the IN operator

12. List every detail of members belonging to BranchNo 1 or 2 or 3

Pattern Search

13. List every detail of members with Name that **starts** with 'Tan'.

Hint: use the LIKE operator and %

14. List every detail of books with Title that **starts** with 'Database'

15. List every detail of book with Title that **ends** with 'Database'

16. List every detail of members with Name that **contains** 'Kim'.

NULL Search

17. List every detail of books that **have not** been categorised yet.

    Hint: use the NULL keyword, comparison operator for NULL is not '=' but 'IS'.

18. List every detail of staff that **do not** have a supervisor.

19. List every detail of staff whose date of birth (DOB) **do not** fall between '1 January 1988' and '30 June 1990'. Display the result in ascending order of date of birth (DOB).

20. List every detail of books that **do not** belong to BookCat 'C ' or 'F '. Display the result in ascending order of BookCat first and then according to descending order of YearPublish. Give another query statement that will produce the same result. **(Hint: use the <> operator)**

    Note: your answers need to include those books that are yet to be categorised.

21. List every detail of staff that have a supervisor in ascending order of their SupervisorID.

22. List every detail of members with address that contains the word 'Street' in ascending order of their Name.

23. List every detail of staff belonging to either branch 1 or 3 who have not been assigned a supervisor. Give another query statement that will produce the same result.

24. List the names, addresses and contact numbers of all members who have joined before the year 2014 who have not yet provided NP40Book with an email address.

25. List the category code for fiction books. In this case, explain why it is more preferable to use the **=** operator than to use the **LIKE** operator.

26. List every detail of books that were not published in the 1990s. Which operator did you use? Rewrite the query using a different operator.