EraaSoft

Using WHERE Clause

```sql
SELECT * FROM employees;
SELECT * FROM employees WHERE salary > 10000;
SELECT * FROM employees WHERE job_id = 'IT_PROG';
```

Using+WHERE+Clause(Code+Samples).sql

By Eslam Khder

EraaSoft

BETWEEN AND Operator

```sql
SELECT * FROM employees WHERE salary BETWEEN 10000 AND 14000;
SELECT * FROM employees WHERE hire_date BETWEEN '07-JUN-02' AND '29-JAN-08';
SELECT * FROM employees WHERE hire_date BETWEEN '07-JUN-02' AND '29-JAN-05';
```

BETWEEN...AND+Operator(Code+Samples).sql

By Eslam Khder

EraaSoft

IN Operator

```sql
SELECT * FROM employees
    WHERE employee_id IN (50, 100, 65, 210)
SELECT * FROM employees
    WHERE employee_id IN (50, 100, 65, 210, 150);
SELECT * FROM employees
    WHERE first_name IN ('Steven', 'Peter', 'Adam');
SELECT * FROM employees
    WHERE first_name IN ('Steven', 'Peter', 'Adam', 'aa');
SELECT * FROM employees
    WHERE hire_date IN ('08-MAR-08', '30-JAN-05');
```

IN+Operator(Code+Samples).sql

By Eslam Khder

EraaSoft

LIKE Operator

```sql
SELECT * FROM employees;
SELECT * FROM employees WHERE job_id = 'SA_REP';
SELECT * FROM employees WHERE job_id LIKE 'SA_REP';
SELECT * FROM employees WHERE job_id LIKE 'SA%';
SELECT * FROM employees WHERE first_name LIKE 'A%';
SELECT * FROM employees WHERE first_name LIKE '%A';
SELECT * FROM employees WHERE first_name LIKE '%a';
SELECT * FROM employees WHERE first_name LIKE '%a%';
SELECT * FROM employees WHERE first_name LIKE '_r%';
```

LIKE+Operator(Code+Samples).sql

By Eslam Khder

EraaSoft

IS NULL Operator

```sql
SELECT * FROM employees WHERE commission_pct = NULL;
SELECT * FROM employees WHERE commission_pct IS NULL;
SELECT * FROM employees WHERE commission_pct IS NOT NULL;
```

IS+NULL+Operator(Code+Samples).sql

By Eslam Khder

EraaSoft

Logical Operators

```sql
SELECT * FROM employees WHERE job_id = 'SA_REP' OR salary > 10000;
SELECT * FROM EMPLOYEES WHERE salary > 10000 AND job_id IN ('SA_MAN', 'SA_REP');
SELECT * FROM EMPLOYEES WHERE salary > 10000 AND job_id NOT IN ('SA_MAN', 'SA_REP');
```

Logical+Operators(Code+Samples).sql

By Eslam Khder

Rules of Precedence

```sql
SELECT first_name, last_name, job_id, salary FROM employees
WHERE (job_id = 'IT_PROG' or job_id = 'ST_CLERK') and salary > 5000;

SELECT first_name, last_name, job_id, salary FROM employees
WHERE job_id = 'IT_PROG' or (job_id = 'ST_CLERK' and salary > 5000);

SELECT first_name, last_name, job_id, salary FROM employees
WHERE job_id = 'IT_PROG' or job_id = 'ST_CLERK' and salary > 5000;

SELECT first_name, last_name, department_id, salary
FROM employees
WHERE salary > 10000 AND department_id = 20 OR department_id = 30;

SELECT first_name, last_name, department_id, salary
FROM employees
WHERE salary > 10000 AND (department_id = 20 OR department_id = 30);
```

Rules+of+Precedence(Code+Samples).sql

By Eslam Khder

ORDER BY Clause

```sql
SELECT * FROM employees;
SELECT first_name, last_name, salary FROM employees ORDER BY first_name;
SELECT first_name, last_name, salary FROM employees ORDER BY last_name;
SELECT first_name, last_name, salary, (10*(salary/5) + 3000) - 100 NEW_SALARY
FROM employees ORDER BY NEW_SALARY;
SELECT first_name, last_name, salary, (10*(salary/5) + 3000) - 100 NEW_SALARY
FROM employees ORDER BY 1;
SELECT first_name, last_name, salary, (10*(salary/5) + 3000) - 100 NEW_SALARY
FROM employees ORDER BY 2;
SELECT *
FROM employees ORDER BY 2;
SELECT *
FROM employees ORDER BY 5;
SELECT *
FROM employees ORDER BY first_name, last_name;
SELECT *
FROM employees ORDER BY first_name, job_id, salary;
```

ORDER+BY+Clause(Code+Samples).sql

By Eslam Khder

EraaSoft

ASC and DESC Operators

```sql
select employee_id, first_name, last_name, salary from employees order by first_name;
select employee_id, first_name, last_name, salary from employees order by first_name asc;
select employee_id, first_name, last_name, salary from employees order by first_name desc;
select employee_id, first_name, last_name, salary from employees order by first_name desc, last_name;
select employee_id, first_name, last_name, salary from employees order by first_name desc, last_name desc;
select employee_id, first_name, last_name, salary from employees order by first_name desc, salary desc;
select employee_id, first_name, last_name, salary s from employees order by first_name desc, s desc;
select employee_id, first_name, last_name, salary s from employees order by 2 desc, s desc;
select first_name, salary, commission_pct from employees order by commission_pct;
```

ASC+and+DESC+Operators(Code+Samples).sql

By Eslam Khder

EraaSoft

NULLS FIRST and NULLS LAST Operators

```sql
select first_name, salary, commission_pct from employees order by commission_pct;
select first_name, salary, commission_pct from employees order by commission_pct NULLS FIRST;
select first_name, salary, commission_pct from employees order by commission_pct ASC NULLS FIRST;
select first_name, salary, commission_pct from employees order by commission_pct DESC;
select first_name, salary, commission_pct from employees order by commission_pct DESC NULLS LAST;
```

NULLS+FIRST+and+NULLS+LAST+Operators(Code+Samples).sql

By Eslam Khder

ROWNUM and ROWID

```sql
SELECT employee_id, first_name, last_name, salary, rowid, rownum from employees;
SELECT employee_id, first_name, last_name, salary, rowid, rownum from employees where department_id = 60;
SELECT employee_id, first_name, last_name, salary, rowid, rownum from employees where department_id = 80;
SELECT employee_id, first_name, last_name, salary, rowid, rownum from employees
    WHERE department_id = 80 and rownum <= 5 order by salary desc;
```

ROWNUM+and+ROWID+in+SQL(Code+Samples).sql

By Eslam Khder

Case Conversion (LOWER,+UPPER,+INITCAP)

```sql
SELECT first_name, UPPER(first_name),
       last_name, LOWER(last_name),
       email, INITCAP(email) FROM employees;

SELECT first_name, UPPER(first_name),
       last_name, LOWER(last_name),
       email, INITCAP(email) FROM employees
WHERE job_id = 'IT_PROG';

SELECT first_name, UPPER(first_name),
       last_name, LOWER(last_name),
       email, INITCAP(email),
       UPPER('bmw i8')FROM employees
WHERE job_id = 'IT_PROG';

SELECT * FROM employees
WHERE last_name = 'KING';

SELECT * FROM employees
WHERE last_name = 'king';

SELECT * FROM employees
WHERE LOWER(last_name) = 'king';

SELECT * FROM employees
WHERE UPPER(last_name) = 'KING';

SELECT * FROM employees
WHERE INITCAP(last_name) = 'King';
```

Case+Conversion+(LOWER,+UPPER,+INITCAP)+Functios(Code+Samples).sql

By Eslam Khder

Character Manipulation Functions

```sql
SELECT first_name, SUBSTR(first_name,3,6), SUBSTR(first_name,3),
    last_name, LENGTH(last_name)
    FROM employees;
SELECT CONCAT(first_name,last_name)
    FROM employees;
SELECT CONCAT(CONCAT(first_name,last_name),employee_id)
    FROM employees;
SELECT first_name || last_name || employee_id
    FROM employees;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', 17, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', 1, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', -1, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', -1, 1) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'in', -1, 1) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'in', 1, 1) FROM dual;
SELECT first_name,INSTR(first_name,'a') from employees;

SELECT TRIM ('      My Name is Adam    ') tem from dual;
SELECT TRIM (' ' FROM '      My Name is Adam    ') tem from dual;
SELECT TRIM (BOTH ' ' FROM '      My Name is Adam    ') tem from dual;
SELECT TRIM (LEADING ' ' FROM '      My Name is Adam    ') tem from dual;
SELECT TRIM (TRAILING ' ' FROM '      My Name is Adam    ') tem from dual;
SELECT TRIM (TRAILING 'm' FROM '      my Name is Adam    ') tem from dual;
SELECT TRIM (TRAILING 'm' FROM 'my Name is Adam') tem from dual;
SELECT TRIM (TRAILING 'm' FROM 'my Name is Adammmmm') tem from dual;
SELECT TRIM (LEADING 'm' FROM 'my Name is Adam') tem from dual;
SELECT TRIM (BOTH 'm' FROM 'my Name is Adam') tem from dual;
SELECT TRIM ('m' FROM 'my Name is Adam') tem from dual;
SELECT TRIM ('m' FROM 'my Name is Ada') tem from dual;
SELECT TRIM (TRAILING 'm' FROM 'my Name is Ada') tem from dual;
SELECT TRIM (TRAILING 'my' FROM 'my Name is Ada') tem from dual;

SELECT RTRIM ('   my Name is Adam   ') tem from dual;
SELECT LTRIM ('   my Name is Adam   ') tem from dual;
SELECT LTRIM ('   my Name is Adam   ', 'my') tem from dual;
SELECT LTRIM ('my Name is Adam', 'my') tem from dual;
SELECT RTRIM ('my Name is Adam', 'my') tem from dual;
SELECT RTRIM ('my Name is Adammmm', 'my') tem from dual;
SELECT LTRIM ('www.mywebsite.com', 'w.') tem from dual;
SELECT LTRIM ('234234217www.mywebsite.com', '0123456789') tem from dual;

select first_name, replace(first_name,'a') rpl from employees;
select first_name, replace(first_name,'a','-') rpl from employees;
select first_name, replace(first_name,'le','-') rpl from employees;
select first_name, replace(first_name,'und','-') rpl from employees;

select first_name, LPAD(first_name,10,'*') pad from employees;
select first_name, RPAD(first_name,10,'*') pad from employees;
select first_name, RPAD(first_name,6,'*') pad from employees;
select first_name, LPAD(first_name,6,'*') pad from employees;
select first_name, LPAD('My name is ',20,'-') pad from employees;
select first_name, LPAD('My name is '||last_name ,20,'-') pad from employees;
```

Character+Manipulation+Functions+(Part+1)+(Code+Samples).sql

By Eslam Khder

INSTR Function

```sql
SELECT INSTR('I am learning how to use functions in Oracle', 'o', 17, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', 1, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', -1, 3) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'o', -1, 1) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'in', -1, 1) FROM dual;
SELECT INSTR('I am learning how to use functions in Oracle', 'in', 1, 1) FROM dual;
SELECT first_name,INSTR(first_name,'a') from employees;
```

Character+Manipulation+Functions+Part+2+(INSTR+Function)+(Code+Samples).sql

By Eslam Khder