-- 1

SELECT \* FROM department WHERE location='Dallas';

-- 2

SELECT \* FROM department;

SELECT emp\_no, emp\_fname, emp\_lname FROM employee WHERE emp\_fname LIKE '\_a%';

SELECT project\_no, job FROM works\_on WHERE job IS NOT NULL;

SELECT \* FROM department WHERE location LIKE 'c,d,f%';

SELECT \* FROM employee WHERE NOT emp\_no = "10102" AND NOT emp\_no = "9031";

select sum(budget) from project;

SELECT emp\_no, project\_no FROM works\_on WHERE project\_no = 'p1' OR project\_no = 'p2';

SELECT \* FROM employee WHERE emp\_no = '29346' AND (emp\_no = '28559' OR emp\_no = '25348');

Select distinct job from works\_on where job like 'm%';

select count(job) from works\_on where job = 'manager' and job = 'clerk';

select emp\_no, emp\_lname from employee where not dep\_no = 'd2';

select project\_name from project where budget < 100000 or budget > 150000;

-- 6

select project\_no, count(distinct job) from works\_on

group by project\_no;

-- 7 Regex ^ beginning of the string

Select \* from department where location RLIKE '^[C-F]';

-- 10

select emp\_no, project\_no from works\_on where project\_no in ('p1', 'p2');

-- 11

select \* from employee where emp\_no in (29346, 28559, 25348);

-- 13

select distinct project\_no, job from works\_on

where job is not null;

-- 14

select project\_no, job, count(job) from works\_on

where job is not null

group by project\_no, job;

-- 17

select e.emp\_fname, e.emp\_lname, d.dept\_name from employee e, department d

where e.dep\_no = d.dept\_no and d.dept\_name = 'research';

-- 18

select e.\*, w.enter\_date from employee e, works\_on w, (select max(enter\_date) as date from employee e1, works\_on w1 where e1.emp\_no = w1.emp\_no and w1.job = 'manager') AS max\_date

where e.emp\_no = w.emp\_no and w.enter\_date = max\_date.date;

-- 19

select project\_name, budget from project where budget between 95000 and 120000;

-- 20

select distinct job, emp\_no from works\_on where job is not null;

-- 21

select (case when job is null then 'Job unknown' else job end) as job,

emp\_no from works\_on where project\_no = 'p1';

-- 22

select project\_name, budget, (budget \* 0.51) as new\_budget from project where budget \* 0.51 > 60000;

-- 23

select project\_no, emp\_no from works\_on where project\_no = 'p2' and job is null;

-- 24

select avg(budget) as budgetAvg from project;

-- 25

select emp\_lname from employee e, (select min(emp\_no) n from employee) as min\_no

where e.emp\_no = min\_no.n;

-- 26

select e.emp\_fname, e.emp\_lname from project p, employee e, works\_on w

where p.project\_no = w.project\_no and w.emp\_no = e.emp\_no and p.project\_name = 'Apollo';

-- 27

select emp\_lname,emp\_fname, dep\_no from employee where emp\_no < 20000

order by emp\_lname, emp\_fname;

-- 28

select emp\_lname,emp\_fname from employee where emp\_no >= 15000;

-- 29

select project\_no, count(emp\_no) from works\_on

group by project\_no

order by count(emp\_no) desc;

-- 30

select e.\* from employee e, department d

where e.dep\_no = d.dept\_no and d.location = 'Dallas';

-- 31

select emp\_no, emp\_lname, emp\_fname from employee

where emp\_lname not rlike '^[J, K, L, M, N, O]' and emp\_fname not rlike '^[E, Z]';

-- 32

select \* from employee where emp\_fname not like '%n';

-- 33

select project\_no from works\_on

group by project\_no having count(emp\_no) < 4;

-- 34

select \* from works\_on where year(enter\_date) >=2007 and year(enter\_date) <2008;

-- join

-- 1

SELECT p.project\_name FROM project p

JOIN (SELECT project\_no FROM works\_on WHERE job = 'Clerk') AS pr\_no ON pr\_no.project\_no = p.project\_no;

-- 2

select e.\*, d.location from employee e

inner join department d on d.dept\_no = e.dep\_no

order by d.location;

-- 3

select e.emp\_lname, d.location from employee e

inner join department d on d.dept\_no = e.dep\_no and d.location != 'Seattle';

-- 4

select max(emp\_no) from employee;

-- 5

-- 6

-- залежить що їх обєнує, якщо у всіх є однакова колонка

-- 7

select e.emp\_no, d.location from employee e

inner join department d on d.dept\_no = e.dep\_no and d.location = 'Seattle';

-- 8

-- Временные таблицы позволяют оптимизировать производительность, так как их результаты записываются в локальное, а не удаленное хранилище.

-- 9

select emp\_no, emp\_lname from employee

where char\_length(emp\_fname) - replace(emp\_fname, 't', '') = 2;

-- 10

select e.emp\_lname, e.emp\_fname from employee e

inner join works\_on w on e.emp\_no = w.emp\_no and w.enter\_date = '2007-01-04';

-- 11

select e.emp\_lname, e.emp\_fname from employee e

inner join works\_on w on e.emp\_no = w.emp\_no and w.job = 'analyst'

inner join department d on e.dep\_no = d.dept\_no and d.location = 'Seattle';

-- 12

select e.dep\_no from employee e

inner join works\_on w on e.emp\_no = w.emp\_no and w.enter\_date = '2007-10-15';

-- 13 -- ???

select e.emp\_no, count(year(w.enter\_date)) from employee e

join works\_on w on e.emp\_no = w.emp\_no

group by e.emp\_no

having count(year(w.enter\_date)) > 1;

9031, 28559, 29346, 25348, 18316

select emp\_no, project\_no, count(year(enter\_date)) from works\_on

group by emp\_no, project\_no;

select year(enter\_date) from works\_on;

select \* from works\_on;

select enter\_date, count(\*) from works\_on

group by enter\_date;

-- 14 ---???

select w.emp\_no from works\_on w

inner join employee e on e.emp\_no = w.emp\_no and e.dep\_no = 'd1'

inner join works\_on w on e.emp\_no = w.emp\_no and w.enter\_date = '2007-10-15';

-- 15

select distinct e.emp\_fname from employee e

inner join works\_on w on e.emp\_no = w.emp\_no and w.enter\_date <= '2008-01-01'

where e.dep\_no = 'd3';

-- 16

select e.emp\_lname, e.emp\_fname from employee e

inner join works\_on w on e.emp\_no = w.emp\_no and w.job = 'manager'

inner join project p on w.project\_no = p.project\_no and p.project\_name = 'Mercury';

-- 17

select emp\_no, emp\_lname from employee

where (emp\_lname like '\_o%' or emp\_lname like '\_a%') and emp\_lname rlike 'es$';

-- 18

select w.emp\_no, w.job from works\_on w

inner join project p on p.project\_no = w.project\_no and p.project\_name = 'Gemini';

-- 19

select distinct emp\_no from works\_on where enter\_date not like '%2007%';

-- 20

select e.emp\_fname, e.emp\_lname from employee e

inner join department d on d.dept\_no = e.dep\_no where d.dept\_name = 'research' or d.dept\_name ='accounting';

-- 21

select distinct p.project\_name from project p

inner join works\_on w on w.project\_no = p.project\_no and w.job = 'clerk';

-- 22

-- для GROUP BY все значения NULL трактуются как равные,

-- то есть при группировке по полю, содержащему NULL-значения, все такие строки попадут в одну группу.

-- 23

-- Форма COUNT (стовпця) підраховує кількість значень в “стовпці”. При підрахунку кількості значень форма функції COUNT не приймає значення значення NULL. Функція COUNT (\*) підраховує кількість стрічок у таблиці,

-- не ігнорує значення NULL, оскільки ця функція працює строками, а не колонками.

-- 24

-- 25

select \* from works\_on;

-- 26

select d1.\* from department d1

join department d2 on d1.dept\_no != d2.dept\_no and d1.location = d2.location;

-- 27.1

select e.emp\_no from employee e

join department d on d.dept\_no = e.dep\_no and d.dept\_name = 'Marketing';

-- 27.2

select e.emp\_no from employee e

where e.dep\_no = (select d.dept\_no from department d where d.dept\_name = 'Marketing');

-- 28

-- 29

select enter\_date from works\_on where project\_no = 'p2' and job is null;

-- 30

select emp\_no from works\_on where job = 'clerk';

-- 31

select p.project\_name from project p

join works\_on w on p.project\_no = w.project\_no ;

-- 32

select distinct e.emp\_no from employee e

join works\_on w on e.emp\_no = w.emp\_no

where w.job = 'clerk' or e.dep\_no = 'd3';

-- 33

select distinct e.emp\_no from employee e

join works\_on w on e.emp\_no = w.emp\_no

where e.dep\_no = 'd1' and w.enter\_date <'2008-01-01';

-- 34

-- 35

-- DISTINCT — вказує, що для розрахунків використовуються лише унікальні значення стовпця. NULL вважається як окреме значення. Якщо потрібно видалити

-- тільки дублікати, краще використовувати DISTINCT.

-- GROUP BY — групує вибраний набір стрічок для отримання набору сусідніх стрічок за значеннями одного або декількох стовпців, або виразів.

-- GROUP BY створює окрему групу для всіх можливих значень (включаючи значення NULL). GROUP BY краще використовувати для визначення груп вихідних рядків, до яких можуть застосовуватися агрегатні функції (COUNT, MIN, MAX, AVG і SUM).

-- 36

-- 37

select location, count(location) from department

group by location;

-- 38

select e.\*, d.dept\_name, d.location from employee e

join department d on d.dept\_no = e.dep\_no;

-- 39

select emp\_no from works\_on where project\_no = 'p2' and emp\_no < 10000;

-- 40

select job, count(job) from works\_on

group by job

having count(job) > 2;

-- 41

select w.enter\_date from works\_on w

join employee e on e.emp\_no = w.emp\_no

where job = 'clerk' and dep\_no = 'd1';