**LUYỆN TẬP SQL – PTIT VERSION**

Địa chỉ: <http://36.50.134.216:3000/>

1. **SQL110**

select \* from class where title like "Introduction%".

1. **SQL103**

SELECT T.\* FROM Teaches T

JOIN Class C ON T.dept = C.dept AND T.number = C.number

JOIN Instructor I ON T.username = I.username

ORDER BY I.lname DESC

LIMIT 2;

1. **SQL117**

ALTER TABLE party\_guests

MODIFY age INT,

MODIFY drinks\_count INT;

1. **SQL100**

select product\_id from Products where low\_fats = "Y" and recyclable = "Y"

1. **SQL113**

SELECT dept, number, LEFT(title, 12) AS short\_title FROM Class;

1. **SQL111**

SELECT \* FROM Class WHERE LOWER(title) LIKE 'introduction%';

1. **SQL106**

select fname from Instructor where username = "zahorjan"

1. **SQL 105**

SELECT I.username, T.dept, T.number, C.title

FROM Instructor I

JOIN Teaches T ON I.username = T.username

JOIN Class C ON T.dept = C.dept AND T.number = C.number

ORDER BY I.lname ASC

LIMIT 2;

1. **SQL 107**

SELECT \* FROM Class WHERE dept = 'CSE' AND number BETWEEN 400 AND 499;

1. **SQL 95**

SELECT name, population, area

FROM World

WHERE area >= 3000000 OR population >= 25000000;

1. **SQL99**

select name from Customer where referee\_id != 2 or referee\_id IS NULL;

1. **SQL96** (SQL Server)

SELECT U.unique\_id, E.name

FROM Employees E

LEFT JOIN EmployeeUNI U ON E.id = U.id;

1. **SQL102**

SELECT W1.id

FROM Weather W1

JOIN Weather W2 ON W1.recordDate = DATE\_ADD(W2.recordDate, INTERVAL 1 DAY)

WHERE W1.temperature > W2.temperature;

1. **SQL94**

SELECT DISTINCT L1.num AS ConsecutiveNums

FROM Logs L1

JOIN Logs L2 ON L1.id = L2.id - 1

JOIN Logs L3 ON L1.id = L3.id - 2

WHERE L1.num = L2.num AND L2.num = L3.num;

1. **SQL112**

SELECT title, LENGTH(title) AS length FROM Class;

1. **SQL104**

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1. **SQL 108**

select \* from Teaches where username = "levy" or username = "djw"

1. **SQL 114**

select \* from Instructor where started\_on < "1990-01-01"

order by username desc

1. **SQL125**

UPDATE SinhVien

SET TrangThai = CASE

WHEN DiemTB >= 5.0 THEN 'Đạt'

ELSE 'Không đạt'

END;

1. **SQL109**

//

1. **SQL120**

CREATE PROCEDURE GetEmployeeById(IN employeeId INT)

BEGIN

    SELECT \* FROM Employees WHERE id = employeeId;

END

1. **SQL98**

DELETE FROM Person

WHERE id NOT IN (

    SELECT MIN(id) FROM Person GROUP BY email

);

1. **SQL116**

SELECT \* FROM Instructor WHERE started\_on >= '2004-01-01';

1. SQL119

//

1. **SQL118**

CREATE TABLE Enrollments (

    enrollment\_id INT PRIMARY KEY,

    student\_id INT,

    course\_id INT,

    enrollment\_date DATE,

    FOREIGN KEY (student\_id) REFERENCES Students(student\_id),

    FOREIGN KEY (course\_id) REFERENCES Courses(course\_id)

);

1. **SQL147**

SELECT \* FROM NHACUNGCAP;

1. **SQL148**

SELECT MAHANG, TENHANG, SOLUONG FROM MATHANG;

1. **SQL149**

SELECT HO, TEN, DIACHI, YEAR(NGAYLAMVIEC) FROM NHANVIEN;

1. **SQL150**

SELECT

    mh.tenhang,

    ncc.macongty,

    ncc.tencongty

FROM MATHANG mh

JOIN NHACUNGCAP ncc ON mh.macongty = ncc.macongty

order by tenhang asc

1. **SQL151**

SELECT DISTINCT

    lh.tenloaihang,

    ncc.tencongty,

    ncc.diachi

FROM LOAIHANG lh

JOIN MATHANG mh ON lh.maloaihang = mh.maloaihang

JOIN NHACUNGCAP ncc ON mh.macongty = ncc.macongty

WHERE lh.tenloaihang = 'furniture';

1. **SQL155**

SELECT DISTINCT

    lh.tenloaihang,

    ncc.tencongty,

    ncc.diachi

FROM LOAIHANG lh

JOIN MATHANG mh ON lh.maloaihang = mh.maloaihang

JOIN NHACUNGCAP ncc ON mh.macongty = ncc.macongty

WHERE lh.tenloaihang = 'furniture';

1. **SQL156**

SELECT

    ddh.sohoadon,

    mh.tenhang,

    mh.giahang as giaban,

    ctdh.soluong,

    ctdh.mucgiamgia,

    ROUND(ctdh.soluong \* mh.giahang \* (1 - ctdh.mucgiamgia / 100), 4) AS sotienphaitra

FROM DONDATHANG ddh

JOIN CHITIETDATHANG ctdh ON ddh.sohoadon = ctdh.sohoadon

JOIN MATHANG mh ON ctdh.mahang = mh.mahang

WHERE ddh.sohoadon = 1002

1. **SQL153**

SELECT

    ddh.sohoadon,

    kh.tengiaodich,

    nv.ten AS tennhanvien,

    ddh.ngaydathang,

    ddh.ngaygiaohang,

    ddh.noigiaohang

FROM DONDATHANG ddh

JOIN KHACHHANG kh ON ddh.makhachhang = kh.makhachhang

JOIN NHANVIEN nv ON ddh.manhanvien = nv.manhanvien

WHERE ddh.sohoadon = 1001;

1. **SQL152**

SELECT DISTINCT

    kh.tengiaodich,

    mh.tenhang

FROM KHACHHANG kh

JOIN DONDATHANG ddh ON kh.makhachhang = ddh.makhachhang

JOIN CHITIETDATHANG ctdh ON ddh.sohoadon = ctdh.sohoadon

JOIN MATHANG mh ON ctdh.mahang = mh.mahang

WHERE mh.tenhang LIKE '%chair%'

1. **SQL134**

(

    SELECT name AS results

    FROM (

        SELECT u.name, COUNT(\*) AS movie\_count,

               ROW\_NUMBER() OVER (ORDER BY COUNT(\*) DESC, u.name ASC) AS rn

        FROM Users u

        JOIN MovieRating mr ON u.user\_id = mr.user\_id

        GROUP BY u.user\_id, u.name

    ) ranked\_users

    WHERE rn = 1

)

UNION ALL

(

    SELECT title AS results

    FROM (

        SELECT m.title, AVG(mr.rating) AS avg\_rating,

               ROW\_NUMBER() OVER (ORDER BY AVG(mr.rating) DESC, m.title ASC) AS rn

        FROM Movies m

        JOIN MovieRating mr ON m.movie\_id = mr.movie\_id

        WHERE mr.created\_at BETWEEN '2020-02-01' AND '2020-02-29'

        GROUP BY m.movie\_id, m.title

    ) ranked\_movies

    WHERE rn = 1

)

1. **SQL132**: select \* from learnsql
2. **SQL101:** select \* from Cinema

where id % 2 = 1 and description != "boring"

order by rating desc

1. **SQL129:** select tweet\_id from Tweets where length(content) > 15
2. **SQL127:** SELECT teacher\_id, COUNT(DISTINCT subject\_id) AS cnt

FROM Teacher

GROUP BY teacher\_id;

1. **SQL126:** SELECT s.user\_id,

       ROUND(COALESCE(SUM(CASE WHEN c.action = 'confirmed' THEN 1 ELSE 0 END) / COUNT(c.user\_id), 0), 2) AS confirmation\_rate

FROM Signups s

LEFT JOIN Confirmations c ON s.user\_id = c.user\_id

GROUP BY s.user\_id;

1. **SQL130:** SELECT p.product\_name, s.year, s.price

FROM Sales s

JOIN Product p ON s.product\_id = p.product\_id;

1. **SQL131:** SELECT distinct customer\_id FROM Customer c

WHERE NOT EXISTS (

    SELECT 1 FROM Product p

    WHERE NOT EXISTS (

        SELECT 1 FROM Customer c2

        WHERE c2.customer\_id = c.customer\_id AND c2.product\_key = p.product\_key

    )

)

GROUP BY customer\_id;

1. **SQL133:** SELECT

    p.product\_id,

    ROUND(SUM(u.units \* p.price) / SUM(u.units), 2) AS average\_price

FROM Prices p

LEFT JOIN UnitsSold u

    ON p.product\_id = u.product\_id

    AND u.purchase\_date BETWEEN p.start\_date AND p.end\_date

GROUP BY p.product\_id

1. **SQL119**: ALTER TABLE Employees

MODIFY COLUMN employee\_id INT;

1. **SQL139:** SELECT

    e.name,

    b.bonus

FROM

    Employee e

LEFT JOIN

    Bonus b

ON

    e.empId = b.empId

WHERE

    b.bonus < 1000 OR b.bonus IS NULL;

1. **SQL128**: SELECT class FROM Courses

GROUP BY class HAVING COUNT(student) >= 5;

1. **SQL136:** SELECT

    s.student\_id,

    s.student\_name,

    sub.subject\_name,

    COUNT(e.subject\_name) AS attended\_exams

FROM

    Students s

CROSS JOIN

    Subjects sub

LEFT JOIN

    Examinations e

ON

    s.student\_id = e.student\_id AND sub.subject\_name = e.subject\_name

GROUP BY

    s.student\_id, s.student\_name, sub.subject\_name

ORDER BY

    s.student\_id, sub.subject\_name;

1. **SQL138:** UPDATE Users SET name = CONCAT(UPPER(SUBSTRING(name, 1, 1)), LOWER(SUBSTRING(name, 2)));
2. **SQL162:**

SELECT CONCAT(HONV, TENLOT, TENNV) AS 'Nhân viên phòng 5'

FROM NHANVIEN

WHERE PHG = 5;

1. **SQL163:**

SELECT DISTINCT PB.TENPHG AS 'Tên phòng'

FROM NHANVIEN NV

JOIN PHONGBAN PB ON NV.PHG = PB.MAPHG;

1. SQL166:

SELECT PB.MAPHG, PB.TENPHG, AVG(NV.LUONG) AS 'Lương trung bình'

FROM NHANVIEN NV

JOIN PHONGBAN PB ON NV.PHG = PB.MAPHG

GROUP BY PB.MAPHG, PB.TENPHG;

1. **SQL 168**

SELECT CONCAT(NV.HONV, ' ', NV.TENLOT, ' ', NV.TENNV) as 'Nhân viên tham gia trên 2 đề án ở TP.HCM'

FROM NHANVIEN NV

JOIN PHANCONG PC ON NV.MANV = PC.MA\_NVIEN

JOIN DEAN D ON PC.MADA = D.MADA

WHERE D.DDIEM\_DA = 'TP.HCM'

GROUP BY NV.HONV, NV.TENLOT, NV.TENNV

HAVING COUNT(DISTINCT D.MADA) >= 2;

1. **SQL167**

SELECT TOP 1 PB.MAPHG, PB.TENPHG

FROM NHANVIEN NV

JOIN PHONGBAN PB ON NV.PHG = PB.MAPHG

GROUP BY PB.TENPHG, PB.MAPHG

ORDER BY AVG(NV.LUONG) DESC;