



# Data Manipulation Language (DML)

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# SELECT

- SELECT

```
SELECT * FROM staff FETCH FIRST 10 ROWS ONLY;
```

```
SELECT DISTINCT dept, job FROM staff;
```

```
SELECT name, salary + comm AS pay FROM staff;
```

- FROM

```
SELECT * FROM staff
```

- WHERE

```
SELECT name, salary FROM staff
```

```
    WHERE salary > 20000;
```

```
SELECT name, job, salary FROM staff
```

```
    WHERE job <> 'Mgr'
```

```
    AND name LIKE 'S%'
```

```
    AND salary > 20000;
```

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# SELECT

- GROUP BY

```
SELECT sales_date, MAX(sales) AS max_sales
FROM sales
GROUP BY sales_date;
```

- HAVING

```
SELECT sales_person, SUM(sales) AS
total_sales FROM sales
GROUP BY sales_person
HAVING SUM(sales) > 25;
```

- ORDER BY

```
"SELECT name, salary FROM staff
WHERE salary > 20000
ORDER BY salary";
```

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# Подзаявки

## ■ Подзаявки

```
SELECT lastname FROM employee
WHERE lastname IN
(SELECT sales_person FROM sales
WHERE sales_date < '01/01/1996');
```

## ■ Корелативни подзаявки

```
SELECT e.salary FROM employee e
WHERE e.salary < (SELECT s.salary FROM
staff s
WHERE s.deptname=e.deptname)";
```

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# JOIN

## ■ JOIN

- Left outer join

```
SELECT e.salary
```

```
FROM employee e LEFT JOIN staff s  
on e.deptname=s.deptname
```

```
WHERE e.salary < 20000";
```

- Right outer join
  - Full outer join
-

# INSERT

- `INSERT INTO staff VALUES (1212, 'Cerny', 20, 'Sales', 3, 90000.00, 30000.00);`
- `INSERT INTO staff VALUES (1213, 'Wolfrum', 20, 'Sales', 2, 90000.00, 10000.00);`
- `INSERT INTO staff (id, name, dept, job, years, salary, comm) VALUES (1212, 'Cerny', 20, 'Sales', 3, 90000.00, 30000.00), (1213, 'Wolfrum', 20, 'Sales', 2, 90000.00, 10000.00);`
- `INSERT INTO pers`  
`SELECT id, name, dept, job, years, salary,`  
`comm`  
`FROM staff WHERE dept = 38;`

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# UPDATE и DELETE

```
UPDATE staff
  SET dept = 51, salary = 70000
  WHERE id = 750;
```

```
UPDATE staff
  SET (dept, salary) = (51, 70000)
  WHERE id = 750;
```

```
DELETE FROM staff
  WHERE id IN (1212, 1213);
```

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