SQL Queries

```
create database projects;
USE projects;
select * from hr;

ALTER TABLE hr
CHANGE COLUMN ï»¿id emp_id VARCHAR(20) NULL;
SET sql_safe_updates=0;

SELECT birthdate from hr;

ALTER TABLE hr
MODIFY COLUMN birthdate DATE;

UPDATE HR
SET hire_date=CASE
WHEN hire_date LIKE '%/%' THEN date_format(str_to_date(hire_date,'%m/%d/%Y'),'%Y-%m-%d')
WHEN hire_date LIKE '%-%' THEN date_format(str_to_date(hire_date,'%m-%d-%Y'),'%Y-%m-%d')
ELSE null
END;

ALTER TABLE hr
MODIFY COLUMN hire_date DATE;

UPDATE HR
SET termdate=date(str_to_date(termdate,'%Y-%m-%d%H:%i:%s UTC'))
WHERE termdate IS NOT NULL AND termdate !=' ';

ALTER TABLE HR
MODIFY COLUMN termdate DATE;
```

```
DESCRIBE HR;
SELECT * FROM HR;

ALTER TABLE HR
ADD COLUMN age INT;

UPDATE HR
SET age=timestampdiff(YEAR,birthdate,CURDATE());

SELECT age FROM HR;
SELECT
MIN(age) AS youngest,
MAX(age) AS oldest
FROM HR;
SELECT COUNT(*) FROM HR
WHERE age<18;

SELECT gender,count(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY gender;

SELECT race,count(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY race
ORDER BY count DESC;

SELECT
MIN(age) AS youngest,
MIN(age) AS oldest
```

```
FROM HR
WHERE age>=18 AND termdate='0000-00-00';

SELECT
	CASE
		WHEN age>=18 AND age<=24 THEN '18-24'
		WHEN age>=25 AND age<=34 THEN '25-34'
		WHEN age>=35 AND age<=44 THEN '35-44'
		WHEN age>=45 AND age<=54 THEN '45-54'
		WHEN age>=55 AND age<=64 THEN '55-64'
		ELSE '65+'
END AS age_group,
COUNT(*) AS count
FROM HR WHERE age>=18 AND termdate='0000-00-00'
GROUP BY age_group
ORDER BY age_group;

SELECT
	CASE
		WHEN age>=18 AND age<=24 THEN '18-24'
		WHEN age>=25 AND age<=34 THEN '25-34'
		WHEN age>=35 AND age<=44 THEN '35-44'
		WHEN age>=45 AND age<=54 THEN '45-54'
		WHEN age>=55 AND age<=64 THEN '55-64'
		ELSE '65+'
END AS age_group,gender,
COUNT(*) AS count
FROM HR WHERE age>=18 AND termdate='0000-00-00'
GROUP BY age_group,gender
ORDER BY age_group,gender;
```

```
SELECT location,COUNT(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY location;

SELECT
        ROUND(AVG(DATEDIFF(termdate,hire_date))/365,0) AS avg_length_employment
   FROM HR
   WHERE termdate<=curdate() AND termdate<>'0000-00-00' AND age>=18;

SELECT department,gender,count(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY department,gender
ORDER BY department;

SELECT jobtitle,count(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY jobtitle
ORDER BY jobtitle DESC;

SELECT department,
total_count,
terminated_count,
terminated_count/total_count AS termination_rate
FROM(
        SELECT department,
   count(*) as total_count,
   SUM(CASE WHEN termdate<> '0000-00-00' AND termdate<=curdate() THEN 1 ELSE 0 END) AS
terminated_count
```

```
FROM HR
WHERE age>=18
GROUP BY department) AS subquery
ORDER BY termination_rate DESC;

SELECT location_state,count(*) AS count
FROM HR
WHERE age>=18 AND termdate='0000-00-00'
GROUP BY location_state
ORDER BY count DESC;

SELECT
year,
hires,
terminations,
hires-terminations AS net_change,
round((hires-terminations)/hires*100,2) AS net_change_percent
FROM(
SELECT YEAR(hire_date) AS YEAR,
count(*) AS hires,
SUM(CASE WHEN termdate<>'0000-00-00' AND termdate<=curdate() THEN 1 ELSE 0 END) AS
terminations
FROM HR
WHERE age>=18
GROUP BY YEAR(hire_date)
) AS subquery
ORDER BY year ASC;

SELECT department,round(avg(datediff(termdate,hire_date)/356),0) AS avg_tenure
FROM HR
WHERE termdate<=curdate() AND termdate<>'000-00-00' AND age>=18
```

```
GROUP BY department;
```