create database Projects2;

use projects2;

create table Developers(

id\_dev int AUTO\_INCREMENT not null,

firstName varchar(20),

lastName varchar(30),

age tinyint,

experience tinyint,

primary key (id\_dev)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table Skills(

id\_skill int AUTO\_INCREMENT not null,

skillName varchar(20),

primary key (id\_skill)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table Company(

id\_company int AUTO\_INCREMENT not null,

nameOfCompany varchar(30),

primary key (id\_company)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table Customer(

id\_customer int AUTO\_INCREMENT not null,

nameOfCustomer varchar(30),

primary key (id\_customer)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table Projects(

id\_project int AUTO\_INCREMENT not null,

nameOfProject varchar(30),

id\_comp int not null,

id\_cust int not null,

FOREIGN KEY (id\_comp) REFERENCES Company(id\_company),

FOREIGN KEY (id\_cust) REFERENCES Customer(id\_customer),

primary key (id\_project)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table DevelopersSkills(

id\_devSkills int AUTO\_INCREMENT not null,

id\_dev int,

id\_skill int,

FOREIGN KEY (id\_dev) REFERENCES Developers(id\_dev),

FOREIGN KEY (id\_skill) REFERENCES Skills(id\_skill),

primary key (id\_devSkills)

)ENGINE=InnoDB CHARACTER SET=UTF8;

create table ProjectsDevelopers(

id\_projectDeveloper int AUTO\_INCREMENT not null,

id\_project int,

id\_dev int,

FOREIGN KEY (id\_dev) REFERENCES Developers(id\_dev),

FOREIGN KEY (id\_project) REFERENCES Projects(id\_project),

primary key (id\_projectDeveloper)

)ENGINE=InnoDB CHARACTER SET=UTF8;

insert into Developers(firstName, lastName, age, experience) values('Sergiy', 'Zamikhovskyy', 39, 1);

insert into Developers(firstName, lastName, age, experience) values('Andriy', 'Kolesnik', 32, 1.5);

insert into Developers(firstName, lastName, age, experience) values('Olexiy', 'Kucherov', 40, 8);

insert into Developers(firstName, lastName, age, experience) values('Olexiy', 'Tokaryev', 30, 7);

insert into Developers(firstName, lastName, age, experience) values('Michael', 'Pervoliev', 40, 13);

insert into Developers(firstName, lastName, age, experience) values('John', 'Hammond', 45, 14);

insert into Developers(firstName, lastName, age, experience) values('Derek', 'Handerson', 23, 5);

insert into Developers(firstName, lastName, age, experience) values('Drue', 'Gurts', 35, 8);

insert into Developers(firstName, lastName, age, experience) values('Celine', 'Yazerk', 20, 2);

insert into Developers(firstName, lastName, age, experience) values('Thomas', 'Folres', 43, 12);

insert into Skills(skillName) values('Java');

insert into Skills(skillName) values('JavaScript');

insert into Skills(skillName) values('C++');

insert into Skills(skillName) values('PHP');

insert into Skills(skillName) values('Android');

insert into Skills(skillName) values('Empbedded');

insert into Skills(skillName) values('HTML/CSS');

insert into Skills(skillName) values('Assembler');

insert into Skills(skillName) values('Python');

insert into Skills(skillName) values('OOP');

insert into Company(nameOfCompany) values('Simeoz Ltd');

insert into Company(nameOfCompany) values('Int Group LLC');

insert into Company(nameOfCompany) values('Wire Service Co.');

insert into customer(nameOfCustomer) values('4Runner Trading Solution');

insert into customer(nameOfCustomer) values('LandLease Market');

insert into customer(nameOfCustomer) values('Regus Real Estate');

insert into customer(nameOfCustomer) values('ReneValue Company');

insert into customer(nameOfCustomer) values('Brajinsky and partners');

insert into customer(nameOfCustomer) values('VVV rtl');

insert into DevelopersSkills(id\_dev, id\_skill) values(1, 10);

insert into DevelopersSkills(id\_dev, id\_skill) values(1, 1);

insert into DevelopersSkills(id\_dev, id\_skill) values(2, 10);

insert into DevelopersSkills(id\_dev, id\_skill) values(2, 3);

insert into DevelopersSkills(id\_dev, id\_skill) values(3, 3);

insert into DevelopersSkills(id\_dev, id\_skill) values(3, 8);

insert into DevelopersSkills(id\_dev, id\_skill) values(4, 10);

insert into DevelopersSkills(id\_dev, id\_skill) values(4, 1);

insert into DevelopersSkills(id\_dev, id\_skill) values(4, 2);

insert into DevelopersSkills(id\_dev, id\_skill) values(4, 7);

insert into DevelopersSkills(id\_dev, id\_skill) values(5, 5);

insert into DevelopersSkills(id\_dev, id\_skill) values(5, 1);

insert into DevelopersSkills(id\_dev, id\_skill) values(6, 9);

insert into DevelopersSkills(id\_dev, id\_skill) values(6, 6);

insert into DevelopersSkills(id\_dev, id\_skill) values(7, 1);

insert into DevelopersSkills(id\_dev, id\_skill) values(7, 3);

insert into DevelopersSkills(id\_dev, id\_skill) values(7, 6);

insert into DevelopersSkills(id\_dev, id\_skill) values(7, 10);

insert into DevelopersSkills(id\_dev, id\_skill) values(8, 2);

insert into DevelopersSkills(id\_dev, id\_skill) values(8, 4);

insert into DevelopersSkills(id\_dev, id\_skill) values(8, 7);

insert into DevelopersSkills(id\_dev, id\_skill) values(8, 6);

insert into DevelopersSkills(id\_dev, id\_skill) values(9, 3);

insert into DevelopersSkills(id\_dev, id\_skill) values(9, 4);

insert into DevelopersSkills(id\_dev, id\_skill) values(9, 7);

insert into DevelopersSkills(id\_dev, id\_skill) values(9, 9);

insert into DevelopersSkills(id\_dev, id\_skill) values(10, 10);

insert into DevelopersSkills(id\_dev, id\_skill) values(10, 5);

insert into DevelopersSkills(id\_dev, id\_skill) values(10, 6);

insert into DevelopersSkills(id\_dev, id\_skill) values(10, 8);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('Big Internet Trad Proj', 1, 1);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('Small Desktop Project', 2, 3);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('Middle Mail Project', 3, 2);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('X Project', 1, 4);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('Denver', 2, 5);

insert into Projects(nameOfProject, id\_comp, id\_cust) values('Satellite Space Umbrella', 3, 6);

insert into projectsdevelopers(id\_project, id\_dev) values( 1, 1);

insert into projectsdevelopers(id\_project, id\_dev) values( 1, 4);

insert into projectsdevelopers(id\_project, id\_dev) values( 1, 5);

insert into projectsdevelopers(id\_project, id\_dev) values( 2, 3);

insert into projectsdevelopers(id\_project, id\_dev) values( 3, 2);

insert into projectsdevelopers(id\_project, id\_dev) values( 3, 6);

insert into projectsdevelopers(id\_project, id\_dev) values( 4, 7);

insert into projectsdevelopers(id\_project, id\_dev) values( 5, 8);

insert into projectsdevelopers(id\_project, id\_dev) values( 6, 9);

insert into projectsdevelopers(id\_project, id\_dev) values( 6, 10);

#1/

alter table developers add column salary int;

update Developers set salary = 1000 where id\_dev = 1;

update Developers set salary = 1300 where id\_dev = 2;

update Developers set salary = 3000 where id\_dev = 3;

update Developers set salary = 3300 where id\_dev = 4;

update Developers set salary = 1301 where id\_dev = 5;

update Developers set salary = 5300 where id\_dev = 6;

update Developers set salary = 3500 where id\_dev = 7;

update Developers set salary = 2500 where id\_dev = 8;

update Developers set salary = 1900 where id\_dev = 9;

update Developers set salary = 1500 where id\_dev = 10;

#2/

select sum(D.salary) as summ, P.nameOfProject as NameProject, P.id\_project as id from developers as D, projects as P, projectsdevelopers as PD where D.id\_dev = PD.id\_dev and P.id\_project = PD.id\_project group by PD.id\_project order by summ desc limit 1;

#3/

select sum(D.salary), S.skillName from developers as D, skills as S, developersskills as DS where D.id\_dev = DS.id\_dev and S.id\_skill = DS.id\_skill and S.skillName like('Java') group by S.id\_skill;

#4/

alter table projects add column cost int;

update projects set cost = 150000 where id\_project = 1;

update projects set cost = 30000 where id\_project = 2;

update projects set cost = 55000 where id\_project = 3;

update projects set cost = 85000 where id\_project = 4;

update projects set cost = 35000 where id\_project = 5;

update projects set cost = 110000 where id\_project = 6;

#5/

create view ProjectsInfo as select P.id\_project, P.nameOfProject, P.cost, D.id\_dev, D.lastName, D.salary, C.id\_company, C.nameOfCompany, P.id\_cust, CU.nameOfCustomer

from projects as P, developers as D, company as C, projectsdevelopers as PD, customer as CU

where P.id\_comp = C.id\_company and D.id\_dev = PD.id\_dev and P.id\_project = PD.id\_project and CU.id\_customer = P.id\_cust;

create view minimumincomeprojectbycompany as select min(cost) as minCost, id\_company, nameOfCompany from projectsinfo group by id\_company;

create view nnn as select distinct cost as distcost, id\_project, salary as avgs, projectsinfo.id\_company, id\_cust, minCost

from projectsinfo inner join minimumincomeprojectbycompany on projectsinfo.id\_company = minimumincomeprojectbycompany.id\_company;

select distinct id\_project, minCost, id\_company, id\_cust from projects.nnn where distcost = minCost;

#6/

create view ProjectsInfo as select P.id\_project, P.nameOfProject, P.cost, D.id\_dev, D.lastName, D.salary, C.id\_company, C.nameOfCompany, P.id\_cust, CU.nameOfCustomer

from projects as P, developers as D, company as C, projectsdevelopers as PD, customer as CU

where P.id\_comp = C.id\_company and D.id\_dev = PD.id\_dev and P.id\_project = PD.id\_project and CU.id\_customer = P.id\_cust;

create view LLL as select avg(salary) as avgs, id\_project, cost, id\_company from projectsinfo group by id\_project;

select avgs, id\_project, LLL.id\_company from LLL inner join minimumincomeprojectbycompany on LLL.cost = minimumincomeprojectbycompany.minCost;