

```
create database StudentManagement;
use StudentManagement;

create table Address
(
    id    int auto_increment primary key,
    address varchar(255) not null
);

create table Classes
(
    id      int auto_increment primary key,
    name    varchar(255) not null,
    language varchar(255) not null,
    description varchar(255) not null
);

create table Students
(
    id          int auto_increment primary key,
    fullnameStudent varchar(255) not null,
    address_id  int,
    age        int      not null,
    phone      varchar(25) unique,
    classes_id  int,
    foreign key (address_id) references Address (id),
    foreign key (classes_id) references Classes (id)
);

create table Course
(
    id      int auto_increment primary key,
    name    varchar(255) not null,
    description varchar(255) not null
);

create table Point
(
    id      int auto_increment primary key,
    course_id int,
    student_id int,
```

```
point double,  
foreign key (course_id) references Course (id),  
foreign key (student_id) references Students (id)  
);
```

```
insert into Address(id, address)  
value  
(null, 'HN'),  
(null, 'BN'),  
(null, 'HG'),  
(null, 'DN'),  
(null, 'SG');
```

```
insert into Classes(id, name, language, description)  
value  
(null, 'C01', 'VN', 'abc'),  
(null, 'C02', 'VN', 'abc'),  
(null, 'C03', 'VN', 'abc'),  
(null, 'C04', 'VN', 'abc'),  
(null, 'C05', 'VN', 'abc');
```

```
insert into Students (id, fullnameStudent, address_id, age, phone, classes_id)  
values (null, 'Nguyen Van A', 1, 12, '123456789', 1),  
      (null, 'Nguyen Van B', 1, 12, '12345678', 1),  
      (null, 'Nguyen Van C', 2, 12, '1234567', 2),  
      (null, 'Nguyen Van D', 2, 12, '123456', 2),  
      (null, 'Nguyen Van E', 3, 12, '12345', 3),  
      (null, 'Nguyen Van F', 3, 12, '1234', 3),  
      (null, 'Nguyen Van G', 4, 12, '123', 4),  
      (null, 'Nguyen Van H', 4, 12, '12', 4),  
      (null, 'Nguyen Van M', 5, 12, '1', 5),  
      (null, 'Nguyen Van N', 5, 12, '0', 5);
```

```
insert into Point(id, course_id, student_id, point)  
value (null, 1, 11, 1),  
(null, 1, 12, 2),  
(null, 2, 12, 3),  
(null, 3, 11, 4),  
(null, 2, 13, 5),  
(null, 3, 14, 6),  
(null, 5, 15, 7),
```

```
(null, 4, 16, 8),  
(null, 4, 17, 9),  
(null, 5, 18, 10),  
(null, 1, 19, 11),  
(null, 1, 20, 12),  
(null, 1, 12, 13),  
(null, 1, 13, 14),  
(null, 1, 14, 15);
```

```
insert into Course(id, name, description)
```

```
value
```

```
(null, 'a', 'a'),  
(null, 'a', 'a'),  
(null, 'b', 'b'),  
(null, 'c', 'c'),  
(null, 'd', 'd'),  
(null, 'e', 'e'),  
(null, 'f', 'f'),  
(null, 'g', 'g'),  
(null, 'h', 'h'),  
(null, 'q', 'q'),  
(null, 'w', 'w'),  
(null, 'e', 'e'),  
(null, 'r', 'r'),  
(null, 't', 't'),  
(null, 'y', 'y'),  
(null, 'u', 'u'),  
(null, 'v', 'v'),  
(null, 'b', 'b'),  
(null, 'z', 'z'),  
(null, 'x', 'x');
```

```
select *
```

```
from Students
```

```
where fullnameStudent = 'Nguyen Van A';
```

```
select *
```

```
from Students
```

```
where age between 18 and 25;
```

```
select *
```

```
from Students
```

```
where id = 12
    or id = 13;

use StudentManagement;

select address.address as address, count(Students.id) as number_of_student
from Students
    join address on address.id = Students.address_id
group by address.address;

select C.name, count(s.id) as 'SO LUONG HS'
from Students s
    join Classes C on C.id = s.classes_id
group by C.name;
select A.address, count(s.fullnameStudent) as 'SO LUONG HS'
from Students s
    join Address A on s.address_id = A.id
group by A.address;
select s.fullnameStudent, avg(P.point)
from Students s
    join Point P on s.id = P.student_id
group by s.fullnameStudent;
select max(p.point) as 'SO DIEM CAO NHAT'
from Point p;
select min(p.point) as 'SO DIEM THAP NHAT'
from Point p;
select upper(s.fullnameStudent)
from Students s;
select C.name, avg(P.point) as AveragePoint
from Point p
    join Course C on C.id = P.course_id
group by c.name
order by AveragePoint DESC
limit 1;
```