

```
-- data manipulation functions/ questions ; select data from multiple tables  
(INNER JOIN)
```

```
-- Show me a list of students who rented instruments
```

```
Select * FROM Students  
WHERE school_student = true;
```

stud_id	firstname	surname	school_student
1	Maria	Nowak	1
2	Jan	Rudy	1
4	Patryk	Kowal	1

```
-- Show me who and when rented clarinet
```

```
SELECT s.firstname, s.surname, r.date_rent_start, i.instr_type  
FROM Students s  
INNER JOIN Rental r  
ON s.stud_id = r.stud_id  
INNER JOIN Instruments i  
ON r.instr_id = i.instr_id  
WHERE instr_type = 'clarinet';
```

firstname	surname	date_rent_start	instr_type
Maria	Nowak	2016-09-20	clarinet

```
-- Tell me, when violin will be able
```

```
SELECT i.instr_id, i.instr_type, r.date_rent_stop  
FROM Instruments i  
INNER JOIN Rental r  
ON i.instr_id = r.instr_id  
WHERE instr_type = 'violin';
```

instr_id	instr_type	date_rent_stop
102	violin	2027-06-26

```
-- aggregating and sorting data, numeric functions
```

```
-- MAX()
```

-- Which instrument has the highest value?

```
SELECT instr_type, instr_value  
FROM Instruments  
WHERE instr_value = (SELECT MAX(instr_value) FROM Instruments);
```

instr_type	instr_value
cello	15300

-- COUNT()

-- How many instruments are rented now ?

```
SELECT COUNT(stud_id)  
FROM Rental  
WHERE date_rent_stop > '2023-01-17';
```

COUNT(stud_id)
4

-- sorting using ORDER BY

-- Rank in descending order the date of rent

```
SELECT * FROM Rental  
ORDER BY date_rent_start DESC;
```

instr_id	date_rent_start	date_rent_stop	stud_id
103	2022-10-01	2027-06-26	4
102	2020-08-30	2027-06-26	3
104	2019-09-10	2024-06-23	2
101	2016-09-20	2023-05-30	1