

-- 1.1

SELECT \* FROM Campus

campus_code	campus_name	street	postcode	city
c111	Pasila	Rautatienkatu 13	00520	Helsinki
c222	Malmi	Hietakummuntie 1 A	00700	Helsinki
c333	Vierumäki	Kaskelantie 10	19120	Vierumäki
c444	Porvoo	Taidetehtaankatu 1	06100	Porvoo

-- 1.2

SELECT city, campus\_name FROM Campus ORDER BY city, campus\_name

city	campus_name
Helsinki	Malmi
Helsinki	Pasila
Porvoo	Porvoo
Vierumäki	Vierumäki

-- 1.3

SELECT description, decision\_maker FROM SanctionType ORDER BY sanction\_code DESC

description	decision_maker
Expulsion	Board of the University
Written warning	President of the University
Oral warning	Head of faculty

-- 1.4

SELECT description FROM MisconductType ORDER BY description

**description**

Assisting another student to cheat (e.g., by allowing own coursework to be copied)

Cheating in an exam

Collusion (unauthorized collaboration)

Copying of coursework from another student

Disturbing teaching or fellow students

Dual submission (submitting own work, which already has been graded for an earlier course, for a second course)

Fabrication (making things up in research-oriented coursework)

Falsification (modifying data in research-oriented coursework)

Falsifying a list of attendees

Freeloading in a group work assignment

Giving false information to University staff to gain an academic advantage

Lack of citation or improper citation

Refusal to take a drug test

Submitting a paper or assignment that is retrieved from the Internet or a paper-mill

Use of intoxicants or being under the influence of intoxicants

(15 rows affected)

--1.5

SELECT surname, first\_name, teacher\_number FROM Teacher ORDER BY surname, first\_name, teacher\_number

surname	first_name	teacher_number
Kiisseli	Marja	h999
Kokki	Seppo	h180
Matikka	Mauri	h777
Ponteva	Veli	h303
Saari	Sisko	h290
Tahko	Olka	h560
Tahko	Olka	h714
Vainio	Veera	h784
Virta	Emma	h430

(9 rows affected)

--1.6

SELECT student\_number, surname, first\_name, birth\_date, gender FROM Student WHERE gender = 'F'

student_number	surname	first_name	birth_date	gender
o148	Rentukka	Sanna	1985-10-22	F
o348	Käki	Kaarina	1985-04-03	F
o410	Liimatta	Leila	1969-03-03	F

<b>o548</b>	Vuori	Valma	1984-10-10	F
<b>o558</b>	Hullerus	Greta	1977-03-28	F
<b>o654</b>	Laine	Rosina	1978-05-07	F

--1.7

```
SELECT salary, surname, first_name, teacher_number FROM Teacher WHERE salary > 16000
ORDER BY salary DESC
```

salary	surname	first_name	teacher_number
<b>25000.00</b>	Kiisseli	Marja	h999
<b>18100.00</b>	Virta	Emma	h430
<b>16049.00</b>	Vainio	Veera	h784

(3 rows affected)

--1.8

```
SELECT teacher_number FROM Teacher WHERE first_name = 'Veera' AND surname = 'Vainio'
```

teacher\_number

h784

--1.9

```
SELECT examiner, CourseGrade.[course_code], CourseGrade.[instance_number], student_number, grade
FROM CourseInstance JOIN CourseGrade ON CourseInstance.course_code = CourseGrade.course_code AND CourseInstance.instance_number =
CourseGrade.instance_number
WHERE examiner = 'h784' ORDER BY course_code, instance_number, student_number
```

examiner	course_code	instance_number	student_number	grade
<b>h784</b>	a480	1	o354	2
<b>h784</b>	a480	2	o298	3
<b>h784</b>	a480	2	o473	0

--1.10

```
SELECT start_date, end_date, course_code, instance_number FROM CourseInstance
WHERE start_date > '2007-01-01' AND end_date < '2007-12-30'
ORDER BY start_date, end_date, course_code, instance_number
```

start_date	end_date	course_code	instance_number
<b>2007-01-03</b>	2007-02-25	a450	1
<b>2007-02-10</b>	2007-04-22	a480	1
<b>2007-03-15</b>	2007-05-30	a730	1
<b>2007-08-01</b>	2007-09-15	a290	1
<b>2007-08-20</b>	2007-10-05	a730	2
<b>2007-10-01</b>	2007-11-20	a730	3

(6 rows affected)

--1.11

Why does **WHERE surname BETWEEN 'A' AND 'L'** still work?

The result looks similar but still technically incomplete

```
SELECT gender, birth_date, surname, first_name FROM Student
WHERE surname >= 'A' AND surname < 'L' ORDER BY gender DESC, birth_date
```

gender	birth_date	surname	first_name
M	1967-02-27	Kaarlo	Kuikka
M	1977-03-28	Keto	Martti
M	1980-08-31	Kuikka	Kaarlo
M	1981-05-22	Huhta	Usko
M	1986-05-17	Keto	Matti
F	1977-03-28	Hullerus	Greta
F	1985-04-03	Käki	Kaarina

--1.13

```
SELECT table_name
FROM information_schema.tables
ORDER BY table_name
```

**table\_name**

**AcademicAdvisor**

**Campus**

**Course**

**CourseGrade**

**CourseInstance**

**Cyclist**

**Department**

Employee

MisconductIncident

MisconductType

Prerequisite

SanctionType

Student

Teacher

Team

--1.14

```
SELECT table_name, column_name, data_type, character_maximum_length,  
       numeric_precision, numeric_scale, is_nullable  
FROM information_schema.columns  
WHERE table_name = 'Teacher'
```

table_name	column_name	data_type	character_maximum_length	numeric_precision	numeric_scale	is_nullable
Teacher	teacher_number	char	4	NULL	NULL	NO
Teacher	first_name	varchar	8	NULL	NULL	NO
Teacher	surname	varchar	8	NULL	NULL	NO
Teacher	birth_date	date	NULL	NULL	NULL	NO
Teacher	gender	char	1	NULL	NULL	NO
Teacher	salary	decimal	NULL	8	2	NO
Teacher	email	varchar	50	NULL	NULL	YES
Teacher	phone	varchar	10	NULL	NULL	YES
Teacher	campus_code	char	4	NULL	NULL	YES

--1.15

```
SELECT table_catalog, table_name, constraint_name, constraint_type
FROM information_schema.table_constraints
ORDER BY table_name, constraint_name
```

table_catalog	table_name	constraint_name	constraint_type
BIT_SW03	AcademicAdvisor	CHK_AcademicAdvisor_end_date	CHECK
BIT_SW03	AcademicAdvisor	FK_AcademicAdvisor_Campus	FOREIGN KEY
BIT_SW03	AcademicAdvisor	FK_AcademicAdvisor_Teacher	FOREIGN KEY
BIT_SW03	AcademicAdvisor	PK_AcademicAdvisor	PRIMARY KEY
BIT_SW03	Campus	AK_Campus	UNIQUE
BIT_SW03	Campus	PK_Campus	PRIMARY KEY
BIT_SW03	Course	AK_Course	UNIQUE
BIT_SW03	Course	CHK_Course_credits	CHECK
BIT_SW03	Course	FK_Course_Teacher	FOREIGN KEY
BIT_SW03	Course	PK_Course	PRIMARY KEY
BIT_SW03	CourseGrade	CHK_CourseGrade_grade	CHECK
BIT_SW03	CourseGrade	FK_CourseGrade_CourseInstance	FOREIGN KEY
BIT_SW03	CourseGrade	FK_CourseGrade_Student	FOREIGN KEY
BIT_SW03	CourseGrade	FK_CourseGrade_Teacher	FOREIGN KEY
BIT_SW03	CourseGrade	PK_CourseGrade	PRIMARY KEY



BIT_SWD03	CourseInstance	CHK_CourseInstance_end_date	CHECK
BIT_SWD03	CourseInstance	CHK_CourseInstance_participants	CHECK
BIT_SWD03	CourseInstance	FK_CourseInstance_Course	FOREIGN KEY
BIT_SWD03	CourseInstance	FK_CourseInstance_Teacher	FOREIGN KEY
BIT_SWD03	CourseInstance	PK_CourseInstance	PRIMARY KEY
BIT_SWD03	Cyclist	FK_Cyclist_Team	FOREIGN KEY
BIT_SWD03	Cyclist	PK_Cyclist	PRIMARY KEY
BIT_SWD03	Department	PK_Department	PRIMARY KEY
BIT_SWD03	Employee	FK_Employee_Department	FOREIGN KEY
BIT_SWD03	Employee	PK_Employee	PRIMARY KEY
BIT_SWD03	MisconductIncident	FK_MisconductIncident_CourseInstance	FOREIGN KEY
BIT_SWD03	MisconductIncident	FK_MisconductIncident_MisconductType	FOREIGN KEY
BIT_SWD03	MisconductIncident	FK_MisconductIncident_SanctionType	FOREIGN KEY
BIT_SWD03	MisconductIncident	FK_MisconductIncident_Student	FOREIGN KEY
BIT_SWD03	MisconductIncident	PK_MisconductIncident	PRIMARY KEY
BIT_SWD03	MisconductType	PK_Misconduct	PRIMARY KEY
BIT_SWD03	Prerequisite	CHK_Prerequisite_code	CHECK
BIT_SWD03	Prerequisite	FK_Prerequisite_Course	FOREIGN KEY
BIT_SWD03	Prerequisite	FK_Prerequisite_Course_prior	FOREIGN KEY
BIT_SWD03	Prerequisite	PK_Prerequisite	PRIMARY KEY
BIT_SWD03	SanctionType	PK_MisconductSanction	PRIMARY KEY

BIT_SWD03	Student	CHK_Student_gender	CHECK
BIT_SWD03	Student	PK_Student	PRIMARY KEY
BIT_SWD03	Teacher	CHK_Teacher_salary	CHECK
BIT_SWD03	Teacher	FK_Teacher_Campus	FOREIGN KEY
BIT_SWD03	Teacher	PK_Teacher	PRIMARY KEY
BIT_SWD03	Team	PK_Team	PRIMARY KEY