



1. What is the name of the student with CWID='11461'

`select Name from HW11_students where CWID = "11461";`

	Name
1	Wright, U

2. What is the total number of students by Major?

`select major, count(*) as Number from HW11_majors group by Major;`

	Major	Number
1	SFEN	8
2	SYEN	6

3. What is the most frequent grade across all students and courses?

`select Grade, max(frequent) from (select Grade, count(*) as frequent from HW11_grades group by Grade);`

	Grade	"max(frequent)"
1	A	11

4. Show the student's name, CWID, and major along with the courses and grades each student received in that course for all grades.

`select s.Name, s.CWID, s.Major, g.Course, g.Grade from HW11_students s join (select Student_CWID, Course, Grade from HW11_grades) g where s.CWID = g.Student_CWID ;`

	Name	CWID	Major	Course	Grade
1	Baldwin, C	10103	SFEN	SSW 567	A
2	Baldwin, C	10103	SFEN	SSW 564	A-
3	Baldwin, C	10103	SFEN	SSW 687	B
4	Wyatt, X	10115	SFEN	SSW 567	A
5	Wyatt, X	10115	SFEN	SSW 564	B+
6	Wyatt, X	10115	SFEN	SSW 687	A
7	Forbes, I	10172	SFEN	SSW 555	A
8	Forbes, I	10172	SFEN	SSW 567	A-
9	Erickson, D	10175	SFEN	SSW 567	A
10	Erickson, D	10175	SFEN	SSW 564	A
11	Erickson, D	10175	SFEN	SSW 687	B-
12	Chapman, O	10183	SFEN	SSW 689	A
13	Cordova, I	11399	SYEN	SSW 540	B
14	Wright, U	11461	SYEN	SYS 800	A
15	Wright, U	11461	SYEN	SYS 750	A-
16	Wright, U	11461	SYEN	SYS 611	A
17	Kelly, P	11658	SYEN	SSW 540	F
18	Morton, A	11714	SYEN	SYS 611	A
19	Morton, A	11714	SYEN	SYS 645	C
20	Fuller, E	11788	SYEN	SSW 540	A

5. Show the names of students who have grades for 'SSW 540'.

`select Name from (HW11_students s join (select Student_CWID, Course, Grade from HW11_grades where Course= "SSW 540") g on s.CWID = g.Student_CWID) where Grade is not null;`

	Name
1	Cordova, I
2	Kelly, P
3	Fuller, E

6. Recreate the Instructor summary table from HW09, including the Instructor's cwid, name, department, course taught, and the number of students who took the course

```
46 instructor_table = PrettyTable()
47 instructor_table.field_names = ["CWID", "Name", "Dept", "Course", "Students"]
48 for row in db.execute('select i.CWID,i.Name, i.Dept, g.Course,g.Number from (HW11_instructors i join (select count(*) as Number, Course, Instr
49     instructor_table.add_row(list(row))
50     print(f"Instructor Summary\n{instructor_table}")
51
```

PROBLEMS 15 OUTPUT DEBUG CONSOLE TERMINAL 2: Python Debug Consc +

CWID	Name	Dept	Course	Students
98765	Einstein, A	SFEN	SSW 540	3
98763	Newton, I	SFEN	SSW 555	1
98764	Feynman, R	SFEN	SSW 564	3
98765	Einstein, A	SFEN	SSW 567	4
98764	Feynman, R	SFEN	SSW 687	3
98763	Newton, I	SFEN	SSW 689	1
98760	Darwin, C	SYEN	SYS 611	2
98760	Darwin, C	SYEN	SYS 645	1
98760	Darwin, C	SYEN	SYS 750	1
98760	Darwin, C	SYEN	SYS 800	1

```
----- 1 -----
('Wright, U',)
----- 2 -----
('SFEN', 8)
('SYEN', 6)
----- 3 -----
('A', 11)
----- 4 -----
('Baldwin, C', '10103', 'SFEN', 'SSW 567', 'A')
('Baldwin, C', '10103', 'SFEN', 'SSW 564', 'A-')
('Baldwin, C', '10103', 'SFEN', 'SSW 687', 'B')
('Wyatt, X', '10115', 'SFEN', 'SSW 567', 'A')
('Wyatt, X', '10115', 'SFEN', 'SSW 564', 'B+')
('Wyatt, X', '10115', 'SFEN', 'SSW 687', 'A')
('Forbes, I', '10172', 'SFEN', 'SSW 555', 'A')
('Forbes, I', '10172', 'SFEN', 'SSW 567', 'A-')
('Erickson, D', '10175', 'SFEN', 'SSW 567', 'A')
('Erickson, D', '10175', 'SFEN', 'SSW 564', 'A')
('Erickson, D', '10175', 'SFEN', 'SSW 687', 'B-')
('Chapman, O', '10183', 'SFEN', 'SSW 689', 'A')
('Cordova, I', '11399', 'SYEN', 'SSW 540', 'B')
('Wright, U', '11461', 'SYEN', 'SYS 800', 'A')
('Wright, U', '11461', 'SYEN', 'SYS 750', 'A-')
('Wright, U', '11461', 'SYEN', 'SYS 611', 'A')
('Kelly, P', '11658', 'SYEN', 'SSW 540', 'F')
('Morton, A', '11714', 'SYEN', 'SYS 611', 'A')
('Morton, A', '11714', 'SYEN', 'SYS 645', 'C')
('Fuller, E', '11788', 'SYEN', 'SSW 540', 'A')
----- 5 -----
('Cordova, I',)
('Kelly, P',)
('Fuller, E',)
----- 6 -----
Instructor Summary
+-----+-----+-----+-----+-----+
| CWID | Name | Dept | Course | Students |
+-----+-----+-----+-----+-----+
| 98765 | Einstein, A | SFEN | SSW 540 | 3 |
| 98763 | Newton, I | SFEN | SSW 555 | 1 |
| 98764 | Feynman, R | SFEN | SSW 564 | 3 |
| 98765 | Einstein, A | SFEN | SSW 567 | 4 |
| 98764 | Feynman, R | SFEN | SSW 687 | 3 |
| 98763 | Newton, I | SFEN | SSW 689 | 1 |
| 98760 | Darwin, C | SYEN | SYS 611 | 2 |
| 98760 | Darwin, C | SYEN | SYS 645 | 1 |
| 98760 | Darwin, C | SYEN | SYS 750 | 1 |
| 98760 | Darwin, C | SYEN | SYS 800 | 1 |
+-----+-----+-----+-----+-----+
```