1, "Find the names of all instructors."

select name from instructor;

name
Lembr
Bawa
Yazdi
Wieland
DAgostino
Liley
Kean
Atanassov
Moreira
Gustafsson
Bourrier
Bondi
Soisalon-Soininen
Morris
Arias
Murata
Tung
Luo
Vicentino
Romero
Lent
Sarkar
Shuming

2. "Find the department names of all instructors,"

select dept_name from instructor;

to avoid duplicacy we can use: select distinct dept_name from instructor;

dept_name		dept_name
Accounting		Accounting
Accounting		Astronomy
Accounting		Athletics
Accounting		Biology
Astronomy		Comp. Sci.
Athletics		Cybernetics
Athletics		Elec. Eng.
Athletics		English
Athletics		Finance
Athletics		Geology
Biology		Languages
Biology		Marketing
Comp. Sci.		Mech. Eng.
Comp. Sci.		Physics
Cybernetics		Pol. Sci.
Cybernetics		Psychology
Cybernetics		Statistics
Cybernetics		
Elec. Eng.		
Elec. Eng.		
Elec. Eng.		
Elec. Eng.		
English		

3. "Find the names of all instructors in the Computer Science department who have salary greater than $70,000."

select name from instructor where dept_name = 'Comp. Sci.' and salary > 70000;

←T→	name
☐ Edit Copy Delete	Bourrier
☐ Edit Copy Delete	Bondi

4. "Retrieve the names of all instructors, along with their department names and department building name."

select name, instructor.dept_name, building from instructor, department where instructor.dept_name= department.dept_name;

name	dept_name	building
Lembr	Accounting	Saucon
Moreira	Accounting	Saucon
Hau	Accounting	Saucon
Ullman	Accounting	Saucon
Romero	Astronomy	Taylor
Bawa	Athletics	Bronfman
Yazdi	Athletics	Bronfman
Murata	Athletics	Bronfman
Tung	Athletics	Bronfman
Jaekel	Athletics	Bronfman
Queiroz	Biology	Candlestick
Valtchev	Biology	Candlestick
Bourrier	Comp. Sci.	Lamberton
Bondi	Comp. Sci.	Lamberton
McKinnon	Cybernetics	Mercer
Pimenta	Cybernetics	Mercer
Bietzk	Cybernetics	Mercer
Dale	Cybernetics	Mercer
Gustafsson	Elec. Eng.	Main
Vicentino	Elec. Eng.	Main
Suliivan	Elec. Eng.	Main
Levine	Elec. Eng.	Main
Kean	English	Palmer
Luo	English	Palmer
Yin	English	Palmer

5. The Cartesian product of the instructor relation with the teaches relation

select name, course_id from instructor, teaches where instructor.ID= teaches.ID;

name	course_id
Lembr	200
Lembr	843
Bawa	457
Wieland	545
Wieland	581
Wieland	591
DAgostino	338
DAgostino	338
DAgostino	352
DAgostino	400
DAgostino	400
DAgostino	482
DAgostino	599
DAgostino	642
DAgostino	663
DAgostino	867
DAgostino	962
DAgostino	972
DAgostino	991
Liley	192
Kean	366
Kean	808
Atanassov	603
Atanassov	604
Gustafsson	169

6. Result of "For all instructors in the university who have taught some course, find their names and the course ID of all courses they taught."

select name, course_id from instructor, teaches where instructor.ID= teaches.ID and instructor.dept name = 'Comp. Sci.';

name	course_id
Bourrier	949
Bourrier	960
Bondi	274
Bondi	571
Bondi	747