

**Patuakhali Science and Technology University**

**Faculty of Computer Science and Engineering**

**CCE 22 :: Database System Sessional**

**DAY-06 PRECTICE**

**Submission Date: Friday, FEB 20, 2025**

**Submitted to:**  
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**Submitted by:**  
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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

Konstantinides

Bancilhon

1. **Find the department names of all instructors select dept\_name from instructor;**

dept\_name Accounting Accounting Accounting Accounting Astronomy Athletics Athletics Athletics Athletics Athletics Biology Biology Comp. Sci. Comp. Sci. Cybernetics

Cybernetics Cybernetics Cybernetics Elec. Eng. Elec. Eng. Elec. Eng. Elec. Eng. English English

1. **Find the department names of all instructors select distinct dept\_name from instructor; dept\_name**

Accounting Astronomy Athletics Biology Comp. Sci. Cybernetics Elec. Eng. English Finance Geology Languages Marketing Mech. Eng.

Physics Pol. Sci. Psychology Statistics

1. **Find all the members of instructor salary \* 1.1 that means it supports arithmetic expressions**

**select ID, name, dept\_name, salary \* 1.1 from instructor;**

ID name dept\_name salary \* 1.1 14365 Lembr Accounting 35465.716

15347 Bawa Athletics 79354.968

16807 Yazdi Athletics 108167.015

19368 Wieland Pol. Sci. 137116.551

22591 DAgostino Psychology 65677.139

25946 Liley Languages 99980.859

28097 Kean English 38525.498

28400 Atanassov Statistics 93481.212

31955 Moreira Accounting 78486.562

3199 Gustafsson Elec. Eng. 90787.807

3335 Bourrier Comp. Sci. 88877.613

34175 Bondi Comp. Sci. 127016.021

35579 Soisalon-Soininen Psychology 68837.571

36897 Morris Marketing 48147.396

37687 Arias Statistics 115019.718

4034 Murata Athletics 67526.316

41930 Tung Athletics 55530.233

4233 Luo English 97670.595

42782 Vicentino Elec. Eng. 37699.937

43779 Romero Astronomy 86977.088

48507 Lent Mech. Eng. 118776.317

48570 Sarkar Pol. Sci. 96304.780

50330 Shuming Physics 118812.991

50885 Konstantinides Languages 35827.550

52647 Bancilhon Pol. Sci. 96753.811

1. **Find all the names of instructors in the computer science department who have salary greater**

**than $70000.**

select name from instructors

where dept\_name = ‘Comp.Sci.’ and salary &gt; 70000;

name Bourrier

Bondi

**1)**

**select id, name , salary / 12 from instructor;**

id name salary / 12 14365 Lembr

2686.796667

15347 Bawa 6011.740000

16807 Yazdi 8194.470833

19368 Wieland 10387.617500

22591 DAgostino 4975.540833

25946 Liley 7574.307500

28097 Kean 2918.598333

|  |  |
| --- | --- |
| 28400 Atanassov | 7081.910000 |
| 31955 Moreira | 5945.951667 |
| 3199 Gustafsson | 6877.864167 |
| 3335 Bourrier | 6733.152500 |

34175 Bondi 9622.425833

35579 Soisalon-Soininen 5214.967500

36897 Morris 3647.530000

37687 Arias 8713.615000

4034 Murata 5115.630000

41930 Tung 4206.835833

4233 Luo 7399.287500

42782 Vicentino 2856.055833

43779 Romero 6589.173333

48507 Lent 8998.205833

48570 Sarkar7295.816667

50330 Shuming 9000.984167

50885 Konstantinides 2714.208333

52647 Bancilhon 7329.834167

**2)**

name

**select name FROM instructor where dept\_name = 'Comp. Sci.';**

Bourrier Bondi

**3)**

**select name , dept\_name from instructor where salary > 70000 and dept\_name =**

**'Comp. Sci.';**

name dept\_name Bourrier Comp. Sci.

Bondi Comp. Sci.

**4)**

**SELECT \* FROM instructor, teaches;**

ID Name dept\_name salary ID course\_id sec\_id semester year

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 14365 Lembr Accounting | | 32241.56 | 14365 200 | | 1 | Spring 2007 | |
| 15347 Bawa Athletics | | 72140.88 | 14365 200 | | 1 | Spring 2007 | |
| 16807 Yazdi Athletics | | 98333.65 | 14365 200 | | 1 | Spring 2007 | |
| 19368 Wieland | Pol. Sci. 124651.41 | | | 14365 200 | | 1 | Spring 2007 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 22591 DAgostino | Psychology 59706.49 | 14365 200 | 1 | Spring 2007 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 25946 Liley Languages | 90891.69 | 14365 200 | 1 | Spring 2007 |
| 28097 Kean English | 35023.18 | 14365 200 | 1 | Spring 2007 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 28400 Atanassov | Statistics | 84982.92 | 14365 200 | 1 | Spring 2007 |
| 31955 Moreira | Accounting | 71351.42 | 14365 200 | 1 | Spring 2007 |
| 3199 Gustafsson | Elec. Eng. | 82534.37 | 14365 200 | 1 | Spring 2007 |
| 3335 Bourrier | Comp. Sci. | 80797.83 | 14365 200 | 1 | Spring 2007 |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| 34175 Bondi Comp. Sci. | 115469.11 | 14365 200 | 1 | Spring 2007 |  |
| 35579 Soisalon-Soininen | Psychology | 62579.61 | 14365 | 200 1 | Spring 2007 |
| 36897 Morris Marketing | 43770.36 | 14365 200 | 1 | Spring 2007 |  |
| 37687 Arias Statistics | 104563.38 | 14365 200 | 1 | Spring 2007 |  |

4034 Murata Athletics 61387.56 14365 200 1 Spring 2007

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 41930 Tung Athletics | 50482.03 | 14365 200 | 1 | Spring 2007 |
| 4233 Luo English | 88791.45 | 14365 200 | 1 | Spring 2007 |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 42782 Vicentino | Elec. Eng. | 34272.67 | | 14365 200 | | 1 | Spring 2007 |
| 43779 Romero | Astronomy | 79070.08 | | 14365 200 | | 1 | Spring 2007 |
| 48507 Lent Mech. Eng. 107978.47 | | | 14365 200 | | 1 | Spring 2007 | |
| 48570 SarkarPol. Sci. 87549.80 | | | 14365 200 | | 1 | Spring 2007 | |
| 50330 Shuming | Physics | 108011.81 | | 14365 200 | | 1 | Spring 2007 |
| 50885 Konstantinides Languages 32570.50 14365 200  52647 Bancilhon Pol. Sci. 87958.01 14365 200 1  5) | | | | | | | 1 Spring  2007  Spring 2007 007 |

**select name, course\_id from instructor, teaches where instructor.ID = teaches.ID**

name course\_id Lembr 200

|  |  |  |
| --- | --- | --- |
|  | | |
| 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) | |  |

**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 |

1. **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 Sullivan Elec. Eng. Main LevineElec. Eng. Main

Kean English Palmer Luo English Palmer Yin English Palmer

1. **List in alphabetic order the names of all instructors SELECT distinct name**

**from instructor order by name;**

name Arias Arinb Atanassov Bancilhon Bawa Bertolino Bietzk Bondi Bourrier Choll DAgostino

Desyl Dusserre Gustafsson Gutierrez Hau

Jaekel Kean Kenje

Konstantinides Lembr

Lent Levine Liley

1. **Find the names of all instructors with salary between $90,000 and $100,000 (that is, ³**

**$90,000 and £ $100,000)**

**select name from instructor where salary between 90000 and 100000;**

name Yazdi Liley McKinnon Sullivan Mahmoud Dale

1. **Tuple comparison**

**select name, course\_id from instructor, teaches**

**where (instructor.ID,dept\_name) = (teaches.ID, 'Biology');**

name course\_id

|  |  |
| --- | --- |
| Queiroz | 559 |
| Valtchev | 415 |
| Valtchev | 702 |

1. **Find courses that ran in Fall 2017 or in Spring 2018**

**(select course\_id from section where semester = 'Fall' and year = 2007) union(select course\_id from section where semester = 'Spring' and year = 2008);**

course\_id 893

489

612

258

468

949

362

852

991

962

237

349

345

158

704

1. **Find the average salary of instructors in the Computer Science department**

**select dept\_name, avg(salary) as avg\_salary from instructor**

**where dept\_name = 'Comp. Sci.';**

Comp. Sci. 98133.470000

1. **Find the total number of instructors who teach a course in the Spring 2007 semester select COUNT(distinct id)**

**from teaches**

**where semester = 'Spring' and year = 2007;**

**COUNT(distinct id)**

4

1. **Find the number of tuples in the course relation select count(\*) as course\_count**

**from course;**



**select dept\_name, ID, avg (salary) from instructor group by dept\_name;**

dept\_name ID avg (salary)

|  |  |
| --- | --- |
| Accounting | 14365 48716.592500 |
| Astronomy | 43779 79070.080000 |
| Athletics | 15347 77098.198000 |
| Biology | 80759 61287.250000 |
| Comp. Sci. | 3335 98133.470000 |
| Cybernetics | 63395 96346.567500 |
| Elec. Eng. | 3199 74162.740000 |
| English | 28097 72089.050000 |
| Finance | 6569 105311.380000 |
| Geology | 77346 99382.590000 |
| Languages | 25946 57421.856667 |
| Marketing | 36897 84097.437500 |
| Mech. Eng. | 48507 79813.020000 |
| Physics | 50330 114576.900000 |
| Pol. Sci. | 19368 100053.073333 |
| Psychology | 22591 61143.050000 |
| Statistics | 28400 67795.441667 |

1. **Find the names and average salaries of all departments whose average salary is greater than 42000**

**select dept\_name, avg (salary) as avg\_salary from instructor**

**group by dept\_name**

**having avg (salary) > 42000;**

dept\_name avg\_salary

|  |  |
| --- | --- |
| Accounting | 48716.592500 |
| Astronomy | 79070.080000 |
| Athletics | 77098.198000 |
| Biology | 61287.250000 |
| Comp. Sci. | 98133.470000 |
| Cybernetics | 96346.567500 |
| Elec. Eng. | 74162.740000 |
| English | 72089.050000 |
| Finance | 105311.380000 |
| Geology | 99382.590000 |
| Languages | 57421.856667 |
| Marketing | 84097.437500 |
| Mech. Eng. | 79813.020000 |
| Physics | 114576.900000 |
| Pol. Sci. | 100053.073333 |
| Psychology | 61143.050000 |
| Statistics | 67795.441667 |