CS3402 Tutorial 3:

1. **Answer**:
2. T1 T2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| P | Q | R1 | A | B | R2 |
| 10 | a | 5 | 10 | b | 6 |
| 10 | a | 5 | 25 | c | 3 |
| 10 | a | 5 | 10 | b | 5 |
| 15 | b | 8 | 10 | b | 6 |
| 15 | b | 8 | 25 | c | 3 |
| 15 | b | 8 | 10 | b | 5 |
| 25 | a | 6 | 10 | b | 6 |
| 25 | a | 6 | 25 | c | 3 |
| 25 | a | 6 | 10 | b | 5 |

1. T1 T2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| P | Q | R1 | A | B | R2 |
| 10 | a | 5 | 10 | b | 6 |
| 10 | a | 5 | 10 | b | 5 |
| 25 | a | 6 | 25 | c | 3 |

1. T1 T2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| P | Q | R1 | A | B | R2 |
| 15 | b | 8 | 10 | b | 6 |
| 15 | b | 8 | 10 | b | 5 |

1. T1 T2

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| P | Q | R1 | A | B | R2 |
| 15 | b | 8 | 10 | b | 6 |
| 15 | b | 8 | 25 | c | 3 |
| 15 | b | 8 | 10 | b | 5 |
| 25 | a | 6 | 25 | c | 3 |
| 25 | a | 6 | 10 | b | 5 |
| 10 | a | 5 | 25 | c | 3 |

1. T1 T2

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| P | Q | R | A | B |
| 10 | a | 5 | 10 | b |
| 25 | a | 6 | 10 | b |

1. **Answer**:
2. Find the SSn (social security number) of all employees who are not supervisors

(EMPLOYEE) − (EMPLOYEE)

1. Find the SSn of all employees who either work in department 5 or directly supervise an employee who works in department 5

( (EMPLOYEE)) ( (EMPLOYEE))

1. List the names and numbers of all departments locating in ‘Houston’

( (DEPARTMENT DEPT\_LOCATIONS) )

1. List the first names of all employees who have a dependent with the same first name as themselves

(EMPLOYEE DEPENDENT))

1. Retrieve the salary of all employees in department 5 who work more than 10 hours per week on the project named ‘ProjectX’

WORK510 **←** WORKS\_ON PROJECT

PROJECTX510 **←**  (WORK510)

(PROJECTX510 EMPLOYEE)