**Assignment 3 (100 points)**

**Kwantlen Polytechnic University**

**INFO-2312, Fall 2022**

**Instructor:** *Cesar Lopez Castellanos*

**1. Given the following Table *(100 marks)*:**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **prjName** | **projMgr** | **empId** | **hours** | **empName** | **budget** | **startDate** | **salary** | **empMgr** | **empDept** | **eval** |
| Albino | Davies | E010 | 21 | Franco | 100,000 | 12/22/21 | 60,000 | Rosco | D010 | 95% |
| E025 | 12 | Morales | 58,000 | Melvin | D015 |  |
| E030 | 22 | Rasskt | 25,000 | Melvin | D015 | 87% |
| E005 | 36 | Arora | 41,000 | Ikura | D012 |  |
| Cosmo | Harris | E010 | 12 | Franco | 150,000 | 02/08/22 | 60,000 | Rosco | D010 | 92% |
| E022 | 15 | Mancini | 62,000 | Rosco | D010 |  |
| E025 | 19 | Morales | 58,000 | Melvin | D015 |  |
| E011 | 12 | Manuel | 36,000 | Ikura | D012 |  |
| Future | Spaletti | E011 | 11 | Manuel | 25,000 | 01/10/22 | 36,000 | Ikura | D012 |  |
| E005 | 9 | Arora | 41,000 | Ikura | D012 | 95% |
| E022 | 12 | Mancini | 62,000 | Rosco | D010 |  |
| Moon | Astro | E003 | 40 | Ortega | 200,000 | 03/25/22 | 46,000 | Franchella | D008 |  |
| E030 | 16 | Rasskt | 25,000 | Melvin | D015 | 50% |
| E025 | 10 | Morales | 58,000 | Melvin | D015 |  |
| Arrow | Oliver | E011 | 22 | Manuel | 85,000 | 03/26/22 | 36,000 | Ikura | D012 |  |
| E022 | 8 | Mancini | 62,000 | Rosco | D010 |  |

1. Take the table to 1NF, if necessary. Provide any comments if applicable ***(14 marks).***

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **prjName** | **empId** | **projMgr** | **hours** | **empName** | **budget** | **startDate** | **salary** | **empMgr** | **empDept** | **eval** |
| Albino | E010 | Davies | 21 | Franco | 100,000 | 12/22/21 | 60,000 | Rosco | D010 | 95% |
| Albino | E025 | Davies | 12 | Morales | 100,000 | 12/22/21 | 58,000 | Melvin | D015 |  |
| Albino | E030 | Davies | 22 | Rasskt | 100,000 | 12/22/21 | 25,000 | Melvin | D015 | 87% |
| Albino | E005 | Davies | 36 | Arora | 100,000 | 12/22/21 | 41,000 | Ikura | D012 |  |
| Cosmo | E010 | Harris | 12 | Franco | 150,000 | 02/08/22 | 60,000 | Rosco | D010 | 92% |
| Cosmo | E022 | Harris | 15 | Mancini | 150,000 | 02/08/22 | 62,000 | Rosco | D010 |  |
| Cosmo | E025 | Harris | 19 | Morales | 150,000 | 02/08/22 | 58,000 | Melvin | D015 |  |
| Cosmo | E011 | Harris | 12 | Manuel | 150,000 | 02/08/22 | 36,000 | Ikura | D012 |  |
| Future | E011 | Spaletti | 11 | Manuel | 25,000 | 01/10/22 | 36,000 | Ikura | D012 |  |
| Future | E005 | Spaletti | 9 | Arora | 25,000 | 01/10/22 | 41,000 | Ikura | D012 | 95% |
| Future | E022 | Spaletti | 12 | Mancini | 25,000 | 01/10/22 | 62,000 | Rosco | D010 |  |
| Moon | E003 | Astro | 40 | Ortega | 200,000 | 03/25/22 | 46,000 | Franchella | D008 |  |
| Moon | E030 | Astro | 16 | Rasskt | 200,000 | 03/25/22 | 25,000 | Melvin | D015 | 50% |
| Moon | E025 | Astro | 10 | Morales | 200,000 | 03/25/22 | 58,000 | Melvin | D015 |  |
| Arrow | E011 | Oliver | 22 | Manuel | 85,000 | 03/26/22 | 36,000 | Ikura | D012 |  |
| Arrow | E022 | Oliver | 8 | Mancini | 85,000 | 03/26/22 | 62,000 | Rosco | D010 |  |

1. Identify a suitable primary key ***(16 marks).***

1. Take your 1NF to 2NF, if necessary. Provide any comments if applicable ***(35 marks).***

|  |  |  |  |
| --- | --- | --- | --- |
| **prjName** | **projMgr** | **budget** | **startDate** |
| Albino | Davies | 100,000 | 12/22/21 |
| Albino | Davies | 100,000 | 12/22/21 |
| Albino | Davies | 100,000 | 12/22/21 |
| Albino | Davies | 100,000 | 12/22/21 |
| Cosmo | Harris | 150,000 | 02/08/22 |
| Cosmo | Harris | 150,000 | 02/08/22 |
| Cosmo | Harris | 150,000 | 02/08/22 |
| Cosmo | Harris | 150,000 | 02/08/22 |
| Future | Spaletti | 25,000 | 01/10/22 |
| Future | Spaletti | 25,000 | 01/10/22 |
| Future | Spaletti | 25,000 | 01/10/22 |
| Moon | Astro | 200,000 | 03/25/22 |
| Moon | Astro | 200,000 | 03/25/22 |
| Moon | Astro | 200,000 | 03/25/22 |
| Arrow | Oliver | 85,000 | 03/26/22 |
| Arrow | Oliver | 85,000 | 03/26/22 |
|  |  |  |  |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **empId** | **empName** | **salary** | **empMgr** | **empDept** |  |  |  |  |  |  |
| E010 | Franco | 60,000 | Rosco | D010 |  |  |  |  |  |  |
| E025 | Morales | 58,000 | Melvin | D015 |  |  |  |  |  |  |
| E030 | Rasskt | 25,000 | Melvin | D015 |  |  |  |  |  |  |
| E005 | Arora | 41,000 | Ikura | D012 |  |  |  |  |  |  |
| E010 | Franco | 60,000 | Rosco | D010 |  |  |  |  |  |  |
| E022 | Mancini | 62,000 | Rosco | D010 |  |  |  |  |  |  |
| E025 | Morales | 58,000 | Melvin | D015 |  |  |  |  |  |  |
| E011 | Manuel | 36,000 | Ikura | D012 |  |  |  |  |  |  |
| E011 | Manuel | 36,000 | Ikura | D012 |  |  |  |  |  |  |
| E005 | Arora | 41,000 | Ikura | D012 |  |  |  |  |  |  |
| E022 | Mancini | 62,000 | Rosco | D010 |  |  |  |  |  |  |
| E003 | Ortega | 46,000 | Franchella | D008 |  |  |  |  |  |  |
| E030 | Rasskt | 25,000 | Melvin | D015 |  |  |  |  |  |  |
| E025 | Morales | 58,000 | Melvin | D015 |  |  |  |  |  |  |
| E011 | Manuel | 36,000 | Ikura | D012 |  |  |  |  |  |  |
| E022 | Mancini | 62,000 | Rosco | D010 |  |  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **prjName** | **empId** | **hours** | **eval** |
| Albino | E010 | 21 | 95% |
| Albino | E025 | 12 |  |
| Albino | E030 | 22 | 87% |
| Albino | E005 | 36 |  |
| Cosmo | E010 | 12 | 92% |
| Cosmo | E022 | 15 |  |
| Cosmo | E025 | 19 |  |
| Cosmo | E011 | 12 |  |
| Future | E011 | 11 |  |
| Future | E005 | 9 | 95% |
| Future | E022 | 12 |  |
| Moon | E003 | 40 |  |
| Moon | E030 | 16 | 50% |
| Moon | E025 | 10 |  |
| Arrow | E011 | 22 |  |
| Arrow | E022 | 8 |  |

1. Take your 2NF to 3NF, if necessary. Provide any comments if applicable ***(35 marks).***

***In your solution, your tables must show data. A relational schema is not a valid answer.***

***Put your solution in a single PDF and submit it before the deadline.***