**CSCI235: Database Systems**

**Laboratory 2**

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**Task 1**

**BOOK**

|  |  |  |  |
| --- | --- | --- | --- |
| Call-number | ISBN | Title | Publisher |
|  |  |  |  |

ISBN → title, publisher

Call-number → title, publisher

Assuming:

Title ↛ publisher

ISBN ↛ call-number

Redundancies will occur in the Book relational table due to: ISBN → title, publisher and Call-number → title, publisher

**STUDENT**

|  |  |  |  |
| --- | --- | --- | --- |
| Student-number | First-name | Last-name | Degree |
|  |  |  |  |

Student-number → first-name, last-name, degree

Assuming:

First-name ↛ last-name, degree

No redundancies occur as each student number should only be listed once.

**BORROW**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Call-number | ISBN | Title | student-number | Borrow-timestamp |
|  |  |  |  |  |

ISBN → title

Call-number → title

Assuming:

Student-number ↛ borrow-timestamp (same student can borrow at multiple times)

Redundancies occur due to ISBN → title and Call-number → title as each borrow instance will show the same title and ISBN/call-number

**LIBRARY**

|  |  |  |  |
| --- | --- | --- | --- |
| Campus-name | Building-number | Employee-number | Full-name |
|  |  |  |  |

Campus-name → building-number

Employee-number → full-name

Redundancies occur due to Employee-number → full-name if they work at more than one library, and Campus-name → building-number as it is repeated for each employee.