Solution of Q1

Primary Key: Movie\_id, Actor\_id, Reviewer\_id

FD1: Movie\_id, Actor\_id -> Actor\_role

FD2: Movie\_id, Reviewer\_id -> Movie\_rating

FD3: Actor\_id -> Actor\_name

FD4: Reviewer\_id -> Reviewer\_name

FD5: Genre\_id -> Genre

**1NF:**

Already in 1NF

**2NF:**

Removing FD1, FD2, FD3 and FD4

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Movie\_id | Movie\_Title | Genre\_id | Genre | Language | Date\_release | Release\_country | Movie\_Rating | Actor\_id | Actor\_name | Reviewer\_id | Reviewer\_name | Number\_of\_ratings | Actor\_ role |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Movie\_id | Movie\_Title | Genre\_id | Genre | Language | Date\_release | Release\_country |

|  |  |  |
| --- | --- | --- |
| Actor\_id | Movie  -id | Actor\_role |

|  |  |  |
| --- | --- | --- |
| Reviewer\_id | Movie\_id | Movie\_ratings |

|  |  |
| --- | --- |
| Actor\_id | Actor\_name |

|  |  |
| --- | --- |
| Reviewer\_id | Reviewer\_name |

**3NF:**

Removing FD5

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Movie\_id | Movie\_Title | Genre\_id | Genre | Language | Date\_release | Release\_country |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Movie\_id | Movie\_Title | Language | Date\_release | Release\_country |

|  |  |  |
| --- | --- | --- |
| Actor\_id | Movie  -id | Actor\_role |

|  |  |  |
| --- | --- | --- |
| Reviewer\_id | Movie\_id | Movie\_ratings |

|  |  |
| --- | --- |
| Actor\_id | Actor\_name |

|  |  |
| --- | --- |
| Reviewer\_id | Reviewer\_name |

|  |  |
| --- | --- |
| Genre\_id | Genre |

Solution of Q2

