**movies 資料表**

尚未正規化

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| movieId | movieName | cinemaId | cinemaName | locationId | locationName | levelId | levelName |
| M001  M002  M003 | STAR WARS：天行者的堀起  葉問4：完結篇  冰雪奇緣2 | TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 | G  PG12  G | 普遍級  輔12級  普遍級 |
| M001  M002  M004 | STAR WARS：天行者的堀起  葉問4：完結篇  白頭山：半島浩劫 | QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 | G  PG12  P | 普遍級  輔12級  保護級 |
| M002  M004 | 葉問4：完結篇  白頭山：半島浩劫 | BQ | 板橋大遠百威秀影城 | bq\_fe | 板橋大遠百 | PG12  P | 輔12級  保護級 |

有單一欄位資料重覆的情形

1NF

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| movieId | movieName | cinemaId | cinemaName | locationId | locationName | levelId | levelName |
| M001 | STAR WARS：天行者的堀起 | TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 | G | 普遍級 |
| M002 | 葉問4：完結篇 | TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 | PG12 | 輔12級 |
| M003 | 冰雪奇緣2 | TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 | G | 普遍級 |
| M001 | STAR WARS：天行者的堀起 | QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 | G | 普遍級 |
| M002 | 葉問4：完結篇 | QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 | PG12 | 輔12級 |
| M004 | 白頭山：半島浩劫 | QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 | P | 保護級 |
| M002 | 葉問4：完結篇 | BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 | PG12 | 輔12級 |
| M004 | 白頭山：半島浩劫 | BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 | P | 保護級 |

準備去除部分相依，進入 2NF

**levels分級資料表**

|  |  |
| --- | --- |
| levelId | levelName |
| G | 普遍級 |
| PG12 | 輔12級 |
| G | 普遍級 |
| G | 普遍級 |
| PG12 | 輔12級 |
| P | 保護級 |
| PG12 | 輔12級 |
| P | 保護級 |

↓

|  |  |
| --- | --- |
| levelId | levelName |
| G | 普遍級 |
| PG12 | 輔12級 |
| P | 保護級 |

**movies 電影資料表**

|  |  |
| --- | --- |
| movieId | movieName |
| M001 | STAR WARS：天行者的堀起 |
| M002 | 葉問4：完結篇 |
| M003 | 冰雪奇緣2 |
| ~~M001~~ | ~~STAR WARS：天行者的堀起~~ |
| ~~M002~~ | ~~葉問4：完結篇~~ |
| M004 | 白頭山：半島浩劫 |
| ~~M002~~ | ~~葉問4：完結篇~~ |
| ~~M004~~ | ~~白頭山：半島浩劫~~ |

↓

|  |  |
| --- | --- |
| movieId | movieName |
| M001 | STAR WARS：天行者的堀起 |
| M002 | 葉問4：完結篇 |
| M003 | 冰雪奇緣2 |
| M004 | 白頭山：半島浩劫 |

**電影院資料表**

|  |  |  |  |
| --- | --- | --- | --- |
| cinemaId | cinemaName | locationId | locationName |
| TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 |
| ~~TP~~ | ~~台北信義威秀影城~~ | ~~tpi\_xinyi~~ | ~~台北信義~~ |
| ~~TP~~ | ~~台北信義威秀影城~~ | ~~tpi\_xinyi~~ | ~~台北信義~~ |
| QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 |
| ~~QS~~ | ~~台北京站威秀影城~~ | ~~tpi\_q\_sqr~~ | ~~台北京站~~ |
| ~~QS~~ | ~~台北京站威秀影城~~ | ~~tpi\_q\_sqr~~ | ~~台北京站~~ |
| BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 |
| ~~BQ~~ | ~~板橋大遠百威秀影~~ | ~~bq\_fe~~ | ~~板橋大遠百~~ |

↓

|  |  |  |  |
| --- | --- | --- | --- |
| cinemaId | cinemaName | locationId | locationName |
| TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 |
| QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 |
| BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 |

2 NF

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **rel\_movie\_cinema\_level電影關聯表**   |  |  |  | | --- | --- | --- | | movieId | levelId | cinemaId | | M001 | G | TP | | M002 | PG12 | TP | | M003 | G | TP | | M001 | G | QS | | M002 | PG12 | QS | | M004 | P | QS | | M002 | PG12 | BQ | | M004 | P | BQ | | **movies 電影資料表**   |  |  | | --- | --- | | movieId | movieName | | M001 | STAR WARS：天行者的堀起 | | M002 | 葉問4：完結篇 | | M003 | 冰雪奇緣2 | | M004 | 白頭山：半島浩劫 | | **levels級別資料表**   |  |  | | --- | --- | | levelId | levelName | | G | 普遍級 | | PG12 | 輔12級 | | P | 保護級 | |
| **cinema電影院資料表**   |  |  |  |  | | --- | --- | --- | --- | | cinemaId | cinemaName | locationId | locationName | | TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 | | QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 | | BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 | | | |

讓我們看看這張表

|  |  |  |  |
| --- | --- | --- | --- |
| cinemaId | cinemaName | locationId | locationName |
| TP | 台北信義威秀影城 | tpi\_xinyi | 台北信義 |
| QS | 台北京站威秀影城 | tpi\_q\_sqr | 台北京站 |
| BQ | 板橋大遠百威秀影 | bq\_fe | 板橋大遠百 |

有欄位之間**遞移相依**的問題，將其去除

↓

**movies電影院資料表**

|  |  |  |
| --- | --- | --- |
| cinemaId | cinemaName | locationId |
| TP | 台北信義威秀影城 | tpi\_xinyi |
| QS | 台北京站威秀影城 | tpi\_q\_sqr |
| BQ | 板橋大遠百威秀影 | bq\_fe |

**locations地點資料表**

|  |  |
| --- | --- |
| locationId | locationName |
| tpi\_xinyi | 台北信義 |
| tpi\_q\_sqr | 台北京站 |
| bq\_fe | 板橋大遠百 |

3NF

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **rel\_movie\_cinema\_level電影關聯表**   |  |  |  | | --- | --- | --- | | movieId | levelId | cinemaId | | M001 | G | TP | | M002 | PG12 | TP | | M003 | G | TP | | M001 | G | QS | | M002 | PG12 | QS | | M004 | P | QS | | M002 | PG12 | BQ | | M004 | P | BQ | | **movies 電影資料表**   |  |  | | --- | --- | | movieId | movieName | | M001 | STAR WARS：天行者的堀起 | | M002 | 葉問4：完結篇 | | M003 | 冰雪奇緣2 | | M004 | 白頭山：半島浩劫 | | **levels級別資料料表**   |  |  | | --- | --- | | levelId | levelName | | G | 普遍級 | | PG12 | 輔12級 | | P | 保護級 | |
| **cinemas電影院資料表**   |  |  |  | | --- | --- | --- | | cinemaId | cinemaName | locationId | | TP | 台北信義威秀影城 | tpi\_xinyi | | QS | 台北京站威秀影城 | tpi\_q\_sqr | | BQ | 板橋大遠百威秀影 | bq\_fe | | | **locations地點資料表**   |  |  | | --- | --- | | locationId | locationName | | tpi\_xinyi | 台北信義 | | tpi\_q\_sqr | 台北京站 | | bq\_fe | 板橋大遠百 | |