1NF: STUDENT (STUNUMB, STUNAME, NUMCRED, ADVNUMB, ADVNAME, CRSENUMB, CRSEDESC, GRADE)

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **STUNUMB** | **STUNAME** | **NUMCRED** | **ADVNUMB** | **ADVNAME** | **CRSENUMB** | **CRSEDESC** | **GRADE** |
| 800342124 | Joe Beck | 3 | 800076565 | Roy Cone | ITCS3160 | Database | B |
| 800342124 | Joe Beck | 3 | 800076565 | Roy Cone | ITCS3166 | Networks | A |
| 800342124 | Joe Beck | 3 | 800076565 | Roy Cone | ITCS4102 | Languages | B |
| 800217341 | Ann Alda | 4 | 800025414 | Ian Jones | ITCS1213 | Java | A |
| 800217341 | Ann Alda | 0 | 800025414 | Ian Jones | ITCS1213L | Java Lab | A |
| 800217341 | Ann Alda | 3 | 800025414 | Ian Jones | MATH1241 | Calculus I | C |
| 800217341 | Ann Alda | 3 | 800025414 | Ian Jones | LBST1104 | Films | A |
| 800666154 | Sue Dane | 3 | 800001136 | Eva Thick | ITCS2215 | Algorithms | B |
| 800666154 | Sue Dane | 3 | 800001136 | Eva Thick | MATH1242 | Calculus II | D |
| 800666154 | Sue Dane | 3 | 800001136 | Eva Thick | ITCS3160 | Database | A |
| 800134666 | Bob Wall | 3 | 800025414 | Ian Jones | MATH1242 | Calculus II | D |
| 800134666 | Bob Wall | 3 | 800025414 | Ian Jones | ITCS3166 | Networks | B |
| 800134666 | Bob Wall | 3 | 800025414 | Ian Jones | ITCS4102 | Languages | C |
| 800134666 | Bob Wall | 3 | 800025414 | Ian Jones | ITCS3160 | Database | B |
| 800189871 | Ava Best | 4 | 800001136 | Eva Thick | ITCS1213 | Java | A |
| 800189871 | Ava Best | 0 | 800001136 | Eva Thick | ITCS1213L | Java Lab | A |
| 800189871 | Ava Best | 3 | 800001136 | Eva Thick | PSYC1101 | Psychology | C |
| 800189871 | Ava Best | 1 | 800001136 | Eva Thick | PSYC1101L | Psych Lab | C |
| 800189871 | Ava Best | 3 | 800001136 | Eva Thick | LBST1104 | Films | B |
| 800314321 | Will Sneed | 3 | 800001136 | Eva Thick | MATH1242 | Calculus II | A |
| 800314321 | Will Sneed | 3 | 800001136 | Eva Thick | ITCS3166 | Networks | A |
| 800314321 | Will Sneed | 3 | 800001136 | Eva Thick | ITCS4102 | Languages | A |
| 800314321 | Will Sneed | 3 | 800001136 | Eva Thick | ITCS3160 | Database | A |

Functional Dependencies:

ADVNUMB🡪ADVNAME

STUNUMB🡪STUNAME, ADVNUMB, ADVNAME

CRSENUMB🡪NUMCRED, CRSEDESC

STUNUMB, CRSENUMB🡪GRADE, NUMCRED, CRSEDESC

STUNUMB, ADVNUMB, CRSENUMB🡪STUNAME, NUMCRED, ADVNAME, CRSEDESC, GRADE

Conversion to 2NF:

STUNUMB: STUNAME

ADVNUMB: ADVNAME

CRSENUMB: NUMCRED, CRSEDESC

STUNUMB, CRSENUMB: GRADE

STUNUMB, ADVNUMB, CRSENUMB: