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ITCS-3160

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**Assignment 4**

**TABLE:** STUDENT (STUNUMB, STUNAME, NUMCRED, ADVNUMB, ADVNAME, CRSENUMB, CRSEDESC, GRADE)

**1NF:**

**Functional dependencies:**

**STUDENT =**  
STUNUMB >>> STUNAME  
ADVNUMB >>> ADVNAME  
STUNUMB >>> ADVNUMB

**STUDENT\_COURSE =**  
{STUNUMB, CRSENUMB} >>> {NUMCRED, CRSEDESC, GRADE}  
CRSENUMB >>> {CRSEDESC, NUMCRED}

**STUDENT (STUNUMB, STUNAME, ADVNUMB, ADVNAME)  
STUDENT\_COURSE (STUNUMB, CRSENUMB, CRSEDESC, NUMCRED, GRADE)**

**2NF:**

**Functional dependencies:**

**STUDENT =**  
STUNUMB >>> STUNAME  
ADVNUMB >>> ADVNAME  
STUNUMB >>> ADVNUMB

**STUDENT\_COURSE =**  
{STUNUMB, CRSENUMB} >>> {GRADE}

**COURSE\_INFO =**  
CRSENUMB >>> {CRSEDESC, NUMCRED}

**STUDENT (STUNUMB, STUNAME, ADVNUMB, ADVNAME))   
STUDENT\_COURSE (STUNUMB, CRSENUMB, GRADE)  
COURSE\_INFO (CRSENUMB, CRSEDESC, NUMCRED)**

**3NF:**

**Functional dependencies:**

**STUDENT =**  
STUNUMB >>> STUNAME  
STUNUMB >>> ADVNUMB

**ADV =**  
ADVNUMB >>> ADVNAME

**STUDENT\_COURSE =**  
{STUNUMB, CRSENUMB} >>> {GRADE}

**COURSE\_INFO =**  
CRSENUMB >>> {CRSEDESC, NUMCRED}

**STUDENT (STUNUMB, STUNAME, ADVNUMB)  
ADV (ADVNUMB, ADVNAME)   
STUDENT\_COURSE (STUNUMB, CRSENUMB, GRADE)  
COURSE\_INFO (CRSENUMB, CRSEDESC, NUMCRED)**