

# Fundamental of Data Management

## Task 4.1.1

### 1NF (First Normalization Form)

#### Given Table

stud_id	stud_name	subj_code	subj_title	sem_year	staff_id	convenor	grade
1234	John Smith	ITM2005	System Architecture	1/2015	111	Bob Hauser	83D
		ACS1005	Data Mgmt	2/2015	222	Jane Collins	44N
9555	Peter Nguyen	ITM2005	System Architecture	1/2015	111	Bob Hauser	95HD
		PRG1001	Programming I	2/2015	333	Ahmad Singh	65C

#### Table Converted to 1<sup>st</sup> Normal Form

Stud_id	Stud_name	Subj_code	Subj_title	Sem	Year	Staff_id	convenor	Marks	Grade
1234	John Smith	ITM2005	System Architecture	1	2015	111	Bob Hauser	83	D
1234	John Smith	ACS1005	Data Management	2	2015	222	Jane Collins	44	N
9555	Peter Nguyen	ITM2005	System Architecture	1	2015	111	Bob Hauser	95	HD
9555	Peter Nguyen	PROG1001	Programming I	2	2015	333	Ahmad Singh	65	C

#### Rules to Achieve 1NF form:

- 1) Each column should contain atomic value i.e. Single Value in each column
- 2) A column should contain values that are of same type
- 3) Each column should have unique name
- 4) Order in which data is stored doesn't matter