Alliyah Taylor

Lab 7

11|2|2016

# Part One:

1. I would tell him that the spreadsheet contains useful data, but that I would like to reorganize it in order to make it appropriate for the database.

2.

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-2005	380.00
DB32	37691	06-15-2005	380.00
DB33	57772	05-27-2005	412.77
WP08	32808	01-12-2006	185.00
WP08	37691	06-15-2005	227.50
WP08	57222	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

3. The Primary Key is (PackageID+TagNumber)

# Part Two:

4.

PackageID	TagNumber	InstallDate	SoftwareCostUSD	SoftwareName	CompModel
AC01	32808	09-13-2005	754.95	DOTT	Toshiba
DB32	32808	12-03-2005	380.00	SPSS	Toshiba
DB32	37691	06-15-2005	380.00	SPSS	Dell
DB33	57772	05-27-2005	412.77	Flash	Apple
WP08	32808	01-12-2006	185.00	MBAM	Toshiba
WP08	37691	06-15-2005	227.50	MBAM	Dell
WP08	57222	05-27-2005	170.24	MBAM	Lenovo
WP09	59836	10-30-2005	35.00	Steam	Apple
WP09	77740	05-27-2005	35.00	Steam	Acer

5. PackageID → SoftwareName

TagNumber → CompModel

(PackageID + TagNumber) → Install Date

(PackageID + TagNumber) + CompModel → SoftwareCostUSD

6. This table is not in 3<sup>rd</sup> normal form because it is not even in 2<sup>nd</sup> normal form. The table has partial key dependencies. CompModel is only dependent on TagNumber and SoftwareName is only dependent on PackageID, they are not dependent on the primary key (PackageID + TagNumber).

Part Three:

# Computers

TagNumber	CompModel
32808	Toshiba
37691	Dell
57772	Apple
57222	Lenovo
59836	Apple
77740	Acer

# Software

PackageID	SoftwareName
AC01	DOTT
DB32	SPSS
DB33	Flash
WP08	MBAM
WP09	STEAM

# Installations

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-2005	380.00
DB32	37691	06-15-2005	380.00
DB33	57772	05-27-2005	412.77
WP08	32808	01-12-2006	185.00
WP08	37691	06-15-2005	227.50
WP08	57222	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

7. Computers PK: TagNumber

Software PK: PackageID

Installation PK: (PackageID + TagNumber)

8. TagNumber → CompModel

PackageID → SoftwareName

(PackageID + TagNumber) → InstallDate, SoftwareCostUSD

9. This is in 3<sup>rd</sup> Normal Form because it is in 2<sup>nd</sup> Normal Form (there are no partial key dependencies) and there are no multi key dependencies. Each non-key entity in the table depends only on the primary key.

10.

