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) → InstallDate, SoftwareCostUSD

6. This table is not in 3rd normal form because it is not even in 2nd 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 3rd Normal Form because it is in 2nd 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.

Computers
PK	Tag Number
	CompModel

Installations
PK, FK	Tag Number
PK, FK	Package ID
	Install Date
	SoftwareCost USD

Software
PK	Package ID
	Software Name