Zachary Fong

4/6/16

Lab 7

Pablo Rivas

Database Management

1a. The spread sheet is a good start, but I could be improved upon. To improve the data table, you would need to first put all the data in the table into first normal form.

1b.

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	59536	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

1c. The primary key is the TagNumber.

2a.

PackageID	TagNumber	InstallDate	SoftwareCostUSD	SoftPackName	CompModel
AC01	32808	09-13-2005	754.95	Zork	Apple
DB32	32808	12-03-2005	380.00	Zork	Apple
DB32	37691	06-15-2005	380.00	Portal	IBM
DB33	57772	05-27-2005	412.77	Adobe	Dell
WP08	32808	01-12-2006	185.00	Zork	Apple
WP08	37691	06-15-2005	227.50	Portal	IBM
WP08	57222	05-27-2005	170.24	Adobe	Dell
WP09	59536	10-30-2005	35.00	MS Office	Lenovo
WP09	77740	05-27-2005	35.00	Google	Asus

2b. PackageID →TagNumber, SoftwareCostUSD, SoftPackName, CompModel

2c. It is not 3rd Normal Form because the data table there are no multiple key dependencies.

3a. PackageID would be the primary key in the Software Package table which would include the Package ID, Software name, and the SoftwareCostUSD.

3b. TagNumber → ComputerModel

   PackageID → PackageName, SoftwareCostUSD

   (PackageID, TagNumber) → InstallDate

3c. The new tables are in 3rd Normal Form because there are no partial key dependencies. Every category of each table only depends on one primary key.

3d.