Normalization Homework #1

Part 1

1) This is a good start but we can also improve it.

2)

PackageID	TagNumber	InstallDate	SofwareCostUSD
AC01	32808	09-13-2005	745.95
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) PackageID, TagNumber, InstallDate

Part 2

1)

PackageID	TagNumber	SoftwareName	ComputerModel	InstallDate	SofwareCostUSD
AC01	32808	Zork	HP	09-13-2005	745.95
DB32	32808	Portal	HP	12-03-2005	380.00
DB32	37691	Portal	Mac	06-15-2005	380.00
DB33	57772	Pokemon	Lenovo	05-27-2005	412.77
WP08	32808	NBA2K	HP	01-12-2006	185.00
WP08	37691	NBA2K	Mac	06-15-2005	227.50
WP08	57222	NBA2K	Dell	05-27-2005	170.24
WP09	59836	Mario Party	LG	10-30-2005	35.00
WP09	77740	Mario Party	Sony	05-27-2005	35.00

2) SoftwareName is depended on PackageID.

ComputerModel is dependent on TagNumber.

InstallDate is dependent on PackageID and TagNumber.

SoftwareCostUSD is dependent on PackageID, TagNumber, and InstallDate.

3) This table is not in third normal form because its not in second normal form. It is
not in second normal form because SoftwareName partially dependent on only
one part of the composite key.

Part 3

1)

Softwares

PackageID	SoftwareName
AC01	Zork
DB32	Portal
DB33	Pokemon
WP08	NBA2K
WP09	Mario Party

Computers

TagNumber	ComputerModel
32808	HP
37691	MAC
57772	Lenovo
57222	Dell
59836	LG
77740	Sony

Installations

PackageID	TagNumber	InstallDate	SofwareCostUSD
AC01	32808	09-13-2005	745.95
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

2) SoftwareName is depended on PackageID.

ComputerModel is dependent on TagNumber.

SoftwareCostUSD is dependent on PackageID, TagNumber, and InstallDate.

3) The new tables are in third normal form because they are in first normal form and second normal form. They also have removed all columns that are not dependent on the primary key.

4)

Software
🔑 PackageID
    SoftwareName

Computers
🔑 TagNumber
    ComputerModel

Software
🔑 PackageID
🔑 TagNumber
🔑 InstallDate
    SoftwareCostUSD