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Part 1

- 1) I would say that it is a good start for a spreadsheet, however we can introduce normalization to the data. This would better organize the data which would increase the readability and reduce the redundancy of the data.

2)

Package ID	Tag Number	Install Date	Software Cost USD
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	01-12-2005	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 consists of the Package ID and Tag Number as a composite key.

Part 2

Package ID	Tag Number	Install Date	Software Cost USD	Software Package Name	Computer Model
AC01	32808	09-13-2005	754.95	League of legends	Apple
DB32	32808	12-03-2005	380.00	Portal	Apple
DB32	37691	06-15-2005	380.00	Portal	Hp
DB33	57772	05-27-2005	412.77	Zork	Dell
WP08	32808	01-12-2005	185.00	Call of duty	Apple
WP08	37691	06-15-2005	227.50	Call of duty	Hp
WP08	57222	05-27-2005	170.24	Call of duty	lenovo
WP09	59836	10-30-2005	35.00	World of warcraft	Apple

WP09	77740	05-27-2005	35.00	World of warcraft	Gateway
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5) The functional dependencies are:

- a. Package ID > Software Package Name
- b. Tag Number > computer model
- c. Package ID + Tag number > Install date
- d. Package ID + Tag number + Install Date > Software Cost USD

6) In order to be considered in the Third normal form all non-primary fields in the table must be dependent on the primary key. In this case the table has 2 parts to the primary key, so all of the data would need to be dependent on both parts. However this is not the case because the Software package name does not rely on tag number and computer model does not rely on package ID.

Part 3

7) The Primary keys would be Package ID, Tag Number, Install date, and a composite Key of package ID, ins tall date and Tag number.

8) Functional Dependencies

- a. Package ID > Software Package Name
- b. Tag Number > computer model
- c. Package ID + Tag number > Install date
- d. Package ID + Tag number + Install Date > Software Cost USD

9) These tables will be third normal form because all of the primary keys will be relied upon by the all of data.

