Part_1

The “Inventory System” is set up to assure that the supplies and raw materials the business depends on are always on hand (available). To accomplish this, there is an inventory-monitor that continuously monitors the current level of all supplies and raw materials (stock items). The Inventory-monitor provides the data about stock-on-hand to the Inventory System. The Inventory system receives invoices from Suppliers when supplies and raw materials (stock items) are delivered and added to the inventory. The Inventory System is capable of determining when to re-order supplies or raw-materials from a supplier. To accomplish the re-ordering task, the Inventory system has threshold values for each stock item; when the inventory level of a given stock item reaches it’s threshold, the Inventory System generates an order to a Supplier to replenish the inventory level for that stock item(s).

For the following Context and Level_0 data flow diagram, redraw the Level_0 diagram using appropriate diagramming software, labeling each data flow. Use snipping tool or other recording method to capture your completed diagram. Add additional sub-processes (5.0,6.0…) if you feel they are necessary. (7 points)
**Part 2:** (13 points)
Create a Level_0 DFD for this version of the ParkIT_DC Context Diagram:

**What is Park It DC?**
Park It DC is an application that allows you to check a specific area in the district for parking information. Why not check parking information before you leave and see what streets you can park on. Check what meters cost money and what ones are free. Park It DC will even help you not get a ticket for parking in an RPP zone!

**How does it Work?**
In Short, we store all data in a database. Every 10 mins. we make a call to the crime and service request feed and either update the already existing record or insert a new one. Then we use Google Maps API calls to read XML files that we generate from the database and plot the data on the map.

**RPP = Residential Parking Permit**

Data Flow Diagram (context level) for Park It information system:
**Part_3:**
Write a memo - 500 words or less- to your future public_sector boss, advising them why your agency (organization) should adopt and standardize on an Open_Source platform like LAMP. (5 points)

To: Department Director  
From: Zhou Pi, Analyst of the Department  
Re: Adopt and Standardize on an Open Source platform  
Date: Fall 2016

I writing this memo to recommend our organization to adopt an open source platform such as LAMP. Open source software are been used a lot today, many corporations and organizations are use them to manage their office system and web application platform.

Here are some major benefits for our organization to adopt an open source platform. First is saving operating cost, leave more money to develop other services. The second is to keep the data/ web management process more flexible, make the reaction to users faster. The last one is, adopt the open source platform can keep the organization with the
developing path of the technology, keep us competitive in the market. Of course there may exist security risk for an organization to adopt the open source platform, but after considering the cost and benefit, it still worth to invest time and money and training people to build up a standardized open source platform. Please let me know if you have any further question.

Bests,

Zhou Pi