## McKesson Assignment 06 Deep Azure

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### Handed out: 11/15/2017 Due by 11:59 PM, midnight (CST) on Tuesday, 11/21/2017

You can do this assignment on your PC, Mac, Linux on Windows or Linux VM. Tell us which environment you are using. Implementation of this assignment will require some light reading of Azure literature on the Internet. If the assignment refers to CLI, you are welcome to use Power Shell or even one of programming languages if that is more convenient for you.

**Problem 01.** Create an Azure blob container and move the attached file storage\_table\_demo.py as a Blob into that container. Demonstrate that you can modify the file and upload it to the same container again. This time download the file back to your operating system and prove that you received back file with recent modifications. Delete the blob, container and the storage account. Do it all using Azure CLI.

(15%)

**Problem 02**. Examine attached file table storage\_table\_demo.py. This is the code we discussed in class which creates and populates Azure Table structure called “itemstable”. Examine the code carefully. It contains practically all the tools you need to deal with Azure Tables. Replace prefix “zdj” of all object names with a short string unique for you. Rather than populate table with Pizzas, populate one of its partitions with cars, as if you are a car dealership. Cars are characterized by make, model, year, color and price. Populate yet another partition with coffee shop inventory. Coffee is characterized by the brand, flavor, size of the cup and price per cup. Place your modified file in your GitHub repository. Open Portal’s Cloud Shell and transfer file from your repository into your home directory of the Cloud Shell. Cloud Shell does have git installed. Run your Python program using command: python2.7 storage\_table\_demo.py. Capture the output. Notice that program waits for your commands. Before you delete your table itemstable, open Azure Storage Explorer and capture the content of your table. Could you think of another way of transferring files to your Cloud Shell home directory?

(20%)

**Problem 03**. Using Azure CLI create a File Share. Move two or free files to that file share. Create two or three directories in that file share. Subsequently, mount that file share as a shared drive on your Windows or MacOS machine. Demonstrate that you can place files from your Windows or MacOS into one of the directories on the shared drive and that they will be visible in Azure Portal.

(20%)

**Problem 04**. Mount the file share you created in problem 3 as a shared drive on your Linux VM, either a CentOS or Ubuntu. This might require some Internet search. You need to find out how to open port 445 on your VM. Demonstrate that you can navigate to the shared folder, create a new directory using Linux mkdir command and copy a file from your Linux OS into that directory. Verify that the directory and the file are visible in Azure Portal. Could you find Azure CLI or Power Shell command to list the content of your Azure File Share

(20%)

**Problem 05.** Follow the slides from Lab 06 on creation of a data factory for the Visual Studio (C#) or for Python.  You are expected to follow one or the other approach. Create all resources noted in the slides.   For the data create a file called astroplayers.txt with 5 players from the World Series Houston Astros Roster (first and last names) or use names from your favorite team.  Create a container called playerscontainer.  Upload astroplayers.txt to a folder in your container called myteam.  After you run your code check that all of your 5 favorite players are in your SQL database table (Visual Studio) or your container's output folder (Python) using the Azure portal.

(20%)

**Problem 06**. Remove all resource groups created in this assignment using Azure CLI. Please use CLI to show that you have no resources left.

(5%)

SUBMISSION INSTRUCTIONS:

Your main submission should be a MS Word or PDF document containing descriptions of your action while configuring Azure services. If your MS Word document is larger than 1 MB, save it as a MINIMIZED PDF. Please be merciful and capture small JPGs. Describe the purpose of every action and the significance of the results. Start with the text of this homework assignment as the template. Please add any other files that you might have used or generated. Please write your solution as if you are writing a tutorial for your colleagues. Please make your text readable. Make sure that your fonts, especially in captured images are not unreadable. Please do not provide ZIP or RAR or any other archives. Canvas cannot open those archives and they turn into a nuisance for us.