Advanced Scripting   
Network Module

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Document Prepared for: CIT361 Student

# Overview

For this assignment you will create a module named Network that contains the functions Get-MACVendor, Get-IPNetwork, and Test-IPNetwork. You will add a class named Mac to the module that can be used to store the information about Mac addresses.

# Requirements:

1. Create a module named <name>-Network.psm1 where <name> is your name, don’t include spaces.
2. Add a class named MAC with the following members:
   1. Property named **Address** to hold the MAC Address
   2. Method called **MACVendorID** that returns the vendor portion of the Mac address (The vendor portion of a MAC address is the first 3 bytes of the address, so if the address is 00:11:22:33:44:55:66 the vendor portion is 00:11:22) that is in the Address property. It should return a string.
   3. Static Method named **MACVendorID** with a parameter named **Address** that accepts a MAC **address** and returns a string that contains the vendor portion of the MAC address that was passed in.
   4. Property Named Vendor that will contain the vendor ID
   5. A constructor with a parameter named **Address** that takes a MAC address and sets the Address property, Fixup the address to use the colon format rather than dashes.
3. Modify the Get-MACVendor function to:
   1. Return MAC objects with the Vendor filled in rather than just a string
   2. Make the DatabasePath parameter optional, if the user does not specify a database use the MACData.txt file included with your module.
4. Include the following author comment block in your psm1 file:

# <# Program Name : <program> Date: <datecreated> Author: <yourname> Corse: CIT361 I, <yourname>, affirm that I wrote this script as original work completed by me. #>

1. Create a manifest file for your module
   1. Expose the functions Get-MACVendor, Get-IPNetwork, and Test-IPNetwork
   2. Set the version to 0.1
   3. Set the Author to your name
   4. Set the company to some fictitious company name-3 a
2. Create the proper folder structure for your module including version sub-folder
3. Include the MACDatabase.txt file with your module

# Deliverable:

Zip your module folder up and upload your zip file to i-learn.

# Grading Rubric:

|  |  |
| --- | --- |
| Element | Points (15) |
| MAC Class | 6 |
| Get-IPNetwork and Test-IPNetwork functions added | 2 |
| Modified Get-MACVendor function | 3 |
| Manifest | 3 |
| Proper Module structure in zip file | 1 |