Advanced Scripting   
Types

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Document Prepared for: CIT361 Student

# Name Daniel Harris ID 235868292

# Instructions

Save a copy of this document. Answer all questions directly in this document. You will save and upload this completed document as your homework submission.

# Overview

This exercise will give you experience working with types in PowerShell. Since you are getting well-seasoned in PowerShell, I’ll just ask questions rather than tell you each command. For each question, record the PowerShell command(s) you used to answer the question. Have fun.

# Requirements

PowerShell

# Task 1—Explore types

## Steps

1. Given the following PowerShell expressions   
   5kb\*1gb
   1. What data type is returned?int34
      1. PowerShell Command(s) gettype()
   2. What is the minimum value of the returned data type? -2147483648
      1. PowerShell Command(s) [int32]::minvalue
   3. What is the maximum value of the returned data type? 2147483648
      1. PowerShell Command(s) [int32]::maxvalue
2. How many static members does the [int] type have? 6
   1. PowerShell Command(s) [int]|gm -static
3. What is the FullName of the [long] type? System.Int64
   1. PowerShell Command(s) [Long].FullName
4. Does the [long] type allow negative numbers? Yes
   1. PowerShell Command(s) [long]::minvalue
5. How many members does the string object support (both static and instance)? 131
   1. PowerShell Command(s) [string]|gm
6. Write a PowerShell command to remove the leading and trailing spaces from the string: ' I Love PowerShell '
   1. PowerShell Command(s) ‘ I love Powershell ‘.Trim()
7. How many types have the word **cryptography** in them on your system? 4
   1. PowerShell Command(s) Get-TypeData -TypeName \* | Where-Object {$\_.TypeName -like '\*cryptography\*'}
8. Is [string] a reference or value type? Value
   1. PowerShell Command(s) ([string]).GetType()
9. What type is returned from the hex value DEADBEEF? *(Hint: it’s not a string type; it’s one of the numeric value types.)* System.object
   1. PowerShell Command(s) $v.gettype()
10. What is the decimal value for the hex value DEADBEEF? 00 01 02 03 04 05 06 07 08 09 0A 0B 0C 0D 0E 0F 00000000 44 45 41 44 42 45 45 46
    1. PowerShell Command(s) ‘Deadbeef’|format-hex
11. What is the type retuned from the command get-process system.diagnostics.process
    1. PowerShell Command(s) gps|get-member

# Task 2—Concepts

1. What is the purpose of a here-string? Used to declare blocks of text that span multiple lines.
2. Describe the difference in behavior of single quoted strings vs double quoted string, include pros and cons. Single quotes are mainly used for text. Double quoted strings pass variables as well as special characters.
3. Describe the difference between a reference type and a value type. Value type is completely contained. Reference types refer to the memory location where the data is stored.

# Deliverable

Upload this document with completed answers to i-learn.