DAT234 PowerShell Assignment

2020

Delivarables and evaluation

Scripts + short report

Report should be as brief as possible and show that the scripts are working, i.e. input and output should be shown.

Each task is worth 1 full point when fully complete, passing mark is 2 points. Bullet points are just for guidance and does not need to be followed. Weight will also be given to the readability of the scripts.

Task 1: Caesars Cipher

Create a script that can encrypt and decrypt a given message and key pair using the Caesars Cipher, encryption/decryption mode should be toggled by the user.

- Decrypt the following text using key 5: UtbjwXmjqq Nx Xt Httq
- Encrypt the plaintext from previous bulletpoint with the same key
- Generalize encrypt/decrypt function for any message/key pair

Task 2: Scytale

Create a script that can encrypt and decrypt a given message and key pair using the Scrytale Cipher, encryption/decryption mode should be toggled by the user.

- Decrypt the following text using key 5: PSOHWEELRL
- Encrypt the plaintext from previous bulletpoint with the same key
- Generalize encrypt/decrypt function for any message/key pair

Task 3: Extend ping function

Create a script that can be given an arbitrary IP address and subnet combination, and it should ping all host addresses in the subnet. The script should accept the IP address and subnet combination in one of the following formats:

- .\ping.ps1 -ip 192.168.1.20 -subnet 255.255.255.0
- .\ping.ps1 -ip 192.168.1.20/24

Note! When testing your script either just print to the screen or test against RFC1918 addresses!