# Lab-2-2: PowerShell loops

# Objectives

* Gather a basic understanding of and experience with Microsoft PowerShell



# Preparation

1. Open the PowerShell ISE (To do that type ‘powershell’ in the search field on your workstation
2. Select Windows **PowerShell ISE**). You can also perform this lab in the basic PowerShell environment (Windows **PowerShell**), but you may be missing the code completion facilities of the Interactive Scripting Environment (ISE).
3. You can also pin it to your taskbar for ease of access in future.

# Exploring PowerShell

Solve the following tasks based on the **integrated help** (get-help), **lecture slides** and PowerShell **online reference**.

**Write down the commands you used to achieve the tasks.**

1. Write a function that will read the time and print evening if it is after 6pm, Afternoon if it is past 12pm, Noon if it is 12pm and morning before 12 pm

function testTime() {

$time = (Get-Date).Hour

if(($time -ge 18) -and ($time -lt 24)) {

Write-Host "Evening"

}

elseif($time -eq 12) {

Write-Host "Noon"

}

elseif($time -gt 12) {

Write-Host "Afternoon"

}

else {

Write-Host "Morning"

}

}

testTime

1. Use foreach-object and pipe to show only the names of running processes and their IDs.

Get-Process | ForEach-Object {(Write-Host "Process ID:" $\_.Id "Process Name:" $\_.Name)}

1. Use foreach loop to show echo each of the getchild-item

function getItems($path) {

"`n Get Child Items From Directory $path`n"

foreach($item in Get-ChildItem -Path $path)

{

Write-Host $item.Name

}

}

getItems C:\Users\leggtc1\

1. Define an array variable to contain numbers from 1 to 10, use pipe and foreach-object to calculate sum of these numbers.

This does not perform the sum, creates the numbers

$nums = (1..30)

$sum = 0

$nums | ForEach-Object { $sum += $\_ }

$sum

1. Save the output of get-process in a csv file, split the words separated by comma. [hints use get-content, pipe and -Delimiter property]

Get-Process | Export-Csv c:\temp\processes.csv -Delimiter ','