Practical exercise 1a: Introduction to Powershell (1)

1- Documentation

a) Instal·ling the nano text editor
b) Basic PowerShell commands
c) Introduction to PowerShell scripting

2- Initial practical exercise

2.1- Run PowerShell as Administrator and install **chocolatey** (1)
2.2- Install the **nano** text editor (1).
2.3- Run PowerShell as Administrator:

- Check the Execution Policy. Run **Get-ExecutionPolicy**.
- Set the **Execution Policy** to **RemoteSigned** (or **Unrestricted** if **RemoteSigned** is not available on your Windows version) if that is not its current value. Run **Set-Execution Unrestricted**

2.4- Create a filed called **pi.ps1** with the following content (with the exception of **Author**, you do not need to write any other comment):

```
# PowerShell script name: pi.ps1
# Author: dacomo
# Date: 20220307
# CFGS ASIX1-DAW1-DAM1
# Academic Year: 2021-2022
# Module and Training Unit: M01UF3
#
cls
Set-Variable PI -Option Constant -Value 3.1416
# $PI is a constant
#
$Radius = Read-Host "Enter radius of the circle (m)"
# $Radius is a variable
# Read-Host reads a line of input from the console. Read-Host can save console input to a variable
#
$Area = $PI * [Math]::Pow($Radius,2)
# [Math] is a class (a collection of functions and variables). It provides common mathematical functions
# Pow() is a function that is part of [Math] class. It returns a number raised to a power
#
Write-Host "Area of a circle with radius equal to $Radius is: $Area m^2"
# Write-Host  writes costumized output to a host console.
exit 0
# Exit code equal to 0. PowerShell script has finished successfully. Run echo $? to check the exit code
```

2.5- Change **Author**. Write your real name and surname
2.6- Run **pi.ps1** → **.\pi.psi**

3- Initial practical exercise (version 2)

3.1- Create a filed called **pi2.ps1** with the following content (with the exception of **Author**, you do not need to write any other comment):

```
# PowerShell script name: pi.ps1
# Author: dacomo
# Date: 20220314
# CFGS ASIX1-DAW1-DAM1
# Academic Year: 2021-2022
# Module and Training Unit: M01UF3
#
cls
$Radius = Read-Host "Enter radius of the circle (m)"
$Area = [Math]::PI * [Math]::Pow($Radius,2)
# [Math] is a class. A class is a collection of function, variables and constants
# [Math]::PI is a constant provided by [Math]. It gets access to PI (14 decimal digits)
Write-Host "Area of a circle with radius equal to $Radius is: $Area m^2"
exit 0
```

3.2- Change **Author**. Write your real name and surname
3.3- Run **pi2.ps1** → **.\pi2.psi**