Exercise 1

Consider the following code:

```
PS C:\Windows\System32> (Measure-Command -Expression { 1..100 | ForEach-Object { Write-Output
 "Nummer $_" | Out-Null } }).Seconds
0
```

a. Explain the apparent contradiction in the output.

b. Research how execution time can be measured (more) precisely. Execute 10 measurements and document the results.

Exercise 2

a. Write a script block that takes a range of the number from 1 thru 100 and prints for each number either *x is even* or *x is odd*.

b. Create a concurrent version of your script.

c. Measure execution time for both versions and document them.

Exercise 3

Consider the following code:

```
PS C:\Windows\System32> $logs = ("System", "Security", "Application")
PS C:\Windows\System32> $logs | ForEach-Object { Get-WinEvent -LogName $_ -MaxEvent 1000 }
```

a. Expain whether a concurrent execution (only) with parameter *-Parallel* will reduce execution time.

b. Measure execution time for both versions and document them.

Exercise 4

Consider the following code:

```
PS C:\Users\anr> 1..1000 | ForEach-Object { Write-Host "Nummer $_" }
```

a. Expain whether a concurrent execution (only) with parameter *-Parallel* will reduce execution time.

b. Measure execution time for both versions and document them.

c. Create a version of the script block that makes use of appropriate concurrency parameters. Measure and document execution time again.