



**MASSEY UNIVERSITY**  
**TE KUNENGA KI PŪREHUROA**  

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**UNIVERSITY OF NEW ZEALAND**

## **Assignment 1**

Report

by

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1.

Pi value	No of processes	Parallel execution time	Speedup
3.1396	1	0.01151	0.01152
3.14169	2	0.01201	0.01201
3.1396	3	0.01199	0.01199
3.14155	4	0.01604	0.01604

According to Amdahl's law the speedups are a little bit unusual.

```
C:\Users\Pasindu (Lenovo)\Documents\Parallel-Computing->"C:\Program Files\Microsoft MPI\Bin\mpiexec.exe" -np 1 assignmen
t1.exe
Estimated value of  $\pi$ : 3.1396
Parallel Execution Time: 0.0115153 seconds
Speedup: 0.0115153

C:\Users\Pasindu (Lenovo)\Documents\Parallel-Computing->"C:\Program Files\Microsoft MPI\Bin\mpiexec.exe" -np 2 assignmen
t1.exe
Estimated value of  $\pi$ : 3.14169
Parallel Execution Time: 0.0120113 seconds
Speedup: 0.0120113

C:\Users\Pasindu (Lenovo)\Documents\Parallel-Computing->"C:\Program Files\Microsoft MPI\Bin\mpiexec.exe" -np 3 assignmen
t1.exe
Estimated value of  $\pi$ : 3.1396
Parallel Execution Time: 0.0119925 seconds
Speedup: 0.0119925

C:\Users\Pasindu (Lenovo)\Documents\Parallel-Computing->"C:\Program Files\Microsoft MPI\Bin\mpiexec.exe" -np 4 assignmen
t1.exe
Estimated value of  $\pi$ : 3.14155
Parallel Execution Time: 0.0160383 seconds
Speedup: 0.0160383
```