

## Result example

### Hello World:

```
-bash-4.1$ mpirun -np 8 ./helloWorld
Hello world from processor 4 out of 8
Hello world from processor 5 out of 8
Hello world from processor 6 out of 8
Hello world from processor 0 out of 8
Hello world from processor 1 out of 8
Hello world from processor 2 out of 8
Hello world from processor 3 out of 8
Hello world from processor 7 out of 8
```

### Simple send-receive:

```
-bash-4.1$ mpirun -np 8 ./sendRec
Processor: 0 sent 1.000000 2.000000 3.000000 4.000000 5.00
00000
Processor: 1 received 1.000000 2.000000 3.000000 4.000000
5.000000
```

## ping pong

!!!(to prove they did send and receive, I let  
0 process send data + 1 and  
1 process send data + 2)!!

```
[~bash-4.1$ mpirun -np 8 ./pingPong
  Processor:      0  sent           1
  Processor:      0  received        3
  Processor:      0  sent           4
  Processor:      0  received        6
  Processor:      0  sent           7
  Processor:      0  received        9
  Processor:      0  sent          10
  Processor:      0  received       12
  Processor:      0  sent          13
  Processor:      0  received       15
  Processor:      1  received        1
  Processor:      1  sent           3
  Processor:      1  received        4
  Processor:      1  sent           6
  Processor:      1  received        7
  Processor:      1  sent           9
  Processor:      1  received       10
  Processor:      1  sent          12
  Processor:      1  received       13
  Processor:      1  sent          15
[~bash-4.1$ exit
logout
```

## Ring

```
-bash-4.1$ mpirun -np 8 ./ring
Processor:      1 sent to      6      1
Processor:      1 recived from      4      4
Processor:      2 sent to      7      2
Processor:      2 recived from      5      5
Processor:      3 sent to      0      3
Processor:      3 recived from      6      6
Processor:      4 sent to      1      4
Processor:      4 recived from      7      7
Processor:      5 sent to      2      5
Processor:      5 recived from      0      0
Processor:      6 sent to      3      6
Processor:      6 recived from      1      1
Processor:      0 sent to      5      0
Processor:      0 recived from      3      3
Processor:      7 sent to      4      7
Processor:      7 recived from      2      2
```

## pi

```
-bash-4.1$ mpirun -np 3 ./pi
9999
answer:      3.1111112
```

```
-bash-4.1$ mpirun -np 3 ./pi
99999
answer:      3.1431913
```