

Execution with 2 processes:

```
bleukiller@ubuntu:~/Documents$ mpirun -np 2 ./exe.o
Write the number of elements:
4
Write 4 elements (one by one):
1
2
3
4

Result of process 0: 3

process 0 has the following local max and min values
local max: 2 local min: 1
process 1 has the following local max and min values
local max: 4 local min: 3
Result of process 1: 7

Max: 4 Min: 1

Median value: 2.50

Variance value: 1.25

Delta array value of position 0 : is : 0.00

Delta array value of position 1 : is : 33.33

Delta array value of position 2 : is : 66.67

Delta array value of position 3 : is : 100.00

Write '1' to continue or write '2' to terminate the program
1
```

Write '1' to continue or write '2' to terminate the program

1

Write the number of elements:

6

Write 6 elements (one by one):

1

2

3

4

5

6

Result of process 0: 6

process 0 has the following local max and min values

local max: 3 local min: 1

process 1 has the following local max and min values

local max: 6 local min: 4

Result of process 1: 15

Max: 6 Min: 1

Median value: 3.50

Variance value: 2.92

Delta array value of position 0 : is : 0.00

Delta array value of position 1 : is : 20.00

Delta array value of position 2 : is : 40.00

Delta array value of position 3 : is : 60.00

Delta array value of position 4 : is : 80.00

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Delta array value of position 4 : is : 80.00
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Delta array value of position 5 : is : 100.00
```

```
Write '1' to continue or write '2' to terminate the program  
2
```

Execution with 4 processes:

```
bleukiller@ubuntu:~/Documents$ mpirun -np 4 ./exe.o
Write the number of elements:
8
Write 8 elements (one by one):
1
2
3
4
5
6
7
8

Result of process 0: 3

process 0 has the following local max and min values
local max: 2 local min: 1
process 1 has the following local max and min values
local max: 4 local min: 3
Result of process 1: 7

process 2 has the following local max and min values
local max: 6 local min: 5
Result of process 2: 11

process 3 has the following local max and min values
local max: 8 local min: 7
Result of process 3: 15

Max: 8 Min: 1

Median value: 4.50

Variance value: 5.25

Delta array value of position 0 : is : 0.00

Delta array value of position 1 : is : 14.29
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Delta array value of position 1 : is : 14.29

Delta array value of position 2 : is : 28.57

Delta array value of position 3 : is : 42.86

Delta array value of position 4 : is : 0.00

Delta array value of position 5 : is : 0.00

Delta array value of position 6 : is : 57.14

Delta array value of position 7 : is : 71.43

Write '1' to continue or write '2' to terminate the program

2