

# 152117108 Advanced Computer Architecture

## App. 1

Only the number of the data per machine ( $x$ ;  $n = px$ ) can be predefined;

MASTER machine;

- Creates a 1-D vector and defines the variables starting from 0 to  $x$ .
- Starts the communication.
- Prints the average results coming from SLAVEs-MASTER communication.

each SLAVE machine;

- Separates the first  $x$  part of the vector and sends the remaining data to the next machine.
- Calculates the average of the data coming from previous machine, and then sends the result to the MASTER.

Design and implement the communication problem illustrated below.

