greetings_rankX10.c 01/05/2021 12.04

```
#include <stdio.h>
    #include <string.h>
    #include "mpi.h'
 4
    int main(int argc, char** argv) {
                                       /* rank of process */
 6
         int
                        my_rank;
                        rank_x_10; /* rank of process times 10 */
received_rank_x_10; /* rank of process times 10
         int
 8
         int
                                          \overline{/}* number of processes */
9
         int
                        p;
                                           /* rank of sender
/* rank of receiver
         int
                        source;
                                                                         */
         int
                        dest;
                                                                        */
                        tag = 0;
                                          /* tag for messages
         int
                                          /* storage for message
/* return status for
                        message[100];
         char
14
         MPI Status status;
                                           /* receive
15
16
         MPI Request request;
17
         /* Start up MPI */
18
19
         MPI Init(&argc, &argv);
21
         /* Find out process rank */
         MPI Comm rank (MPI COMM WORLD, &my rank);
23
24
         /* Find out number of processes */
         MPI Comm size (MPI COMM WORLD, &p);
26
27
         if (my_rank != 0) {
2.8
              /* Create message */
29
              dest = 0;
              rank_x_10 = my_rank * 10 ; // supercalcolo LOL!
MPI_Send(&rank_x_10, 1, MPI_INT, dest, tag, MPI_COMM_WORLD);
31
32
         } else { /* my rank == 0 */
34
              for (source = 1; source < p; source++) {</pre>
                   // Provare con e sneza tag MPI_ANY_SOURCE ;)
36
                   //MPI Recv(&received rank x 10, 1, MPI INT, source, tag, MPI COMM WORLD, &status)
                   //printf("Received %\overline{d} rank\overline{10} from source %d\n", received_rank_x_1\overline{0}, source);
                   MPI_Recv(&received_rank_x_10, 1, MPI_INT, MPI_ANY_SOURCE, tag, MPI_COMM_WORLD, &sprintf("Received %d rank10 from source %d\n", received_rank_x_10, status.MPI_SOURce.")
38
39
40
              }
41
         }
42
43
         /* Shut down MPI */
        MPI_Finalize();
44
    } /* main */
45
46
```