

# Anel de Processos

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```
-module(ring).
-export([send/2]).

%% @doc Send M messages through a ring of N processes.
send(M, N) →
    statistics(runtime),
    H = lists:foldl(
        fun(Id, Pid) → spawn_link(fun() → loop(Id, Pid, M) end) end,
        self(),
        lists:seq(N, 2, -1)),
    {_, Time} = statistics(runtime),
    io:format("~p processes spawned in ~p ms~n", [N, Time]),
    statistics(runtime),
    H ! M,
    loop(1, H, M).

loop(Id, Pid, M) →
    receive
        1 →
            {_, Time} = statistics(runtime),
            io:format("~p messages sent in ~p ms~n", [M, Time]),
            exit(self(), ok);
        Index →
            Pid ! Index - 1,
            loop(Id, Pid, M)
    end.
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# Comparação tempos

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	100 P e 100 M	1000 P e 1000 M	10000 P e 1000 M	100000 P e 10000 M
Erlang	0,001 s	0.009 s	0,039 s	0,418 s