**function** ERDOSRENYI(number of nodes $n$, number of edges $e$, number of operations $o$)
    $P \leftarrow \{(i, j) \mid i \in \{1 \,..\, n-1\} \wedge j \in \{0 \,..\, i-1\}\}$ ▷ All possible interactions
    $N_0 \leftarrow$ Sample $e$ edges from $P$
    $N_c \leftarrow N_0$
    **while** $|O| < o$ **do**
        $e_a \leftarrow$ Sample 1 edge from $P \setminus N_c$
        $e_r \leftarrow$ Sample 1 edge from $N_c$
        $N_c \leftarrow (N_c \setminus e_r) \cup \{e_a\}$
        $O \leftarrow O + ((\mathrm{ADD}, e_a), (\mathrm{REM}, e_r))$
    **end while**
    $O \leftarrow \mathrm{HEAD}(O, o)$
    **return** $(N_0, O)$ ▷ Return the initial geometric network and $o$ operations
**end function**