Code description:

The `computeActiveSitesDensity` program defines a 2D non-periodic cylindrical system of size L connected to two reservoirs with densities equal to $\lambda_l = 0$ and $\lambda_r = 1$. The particle density of the system is set at the critical threshold ρ_c.

The system undergoes particle jumps, the number of which is user-defined by `n_jumps`.

After each jump, the program records the number of occupied sites, active sites, and active edges at each section x of the cylinder. These values are then used to calculate the particle density $\rho(x)$, the active particle density $\rho_a(x)$, and the activity $a(x)$, respectively. Once all particle jumps have been completed, the program then computes the average values of the three arrays.

The results are saved in the `results.txt` file.

Input parameters:

Parameter	**Variable name**	**Data type**
Save folder	`save_folder`	string
System size L	`L`	integer
Critical density ρ_c	`rho_c`	double
Number of jumps	`n_jumps`	integer

Post process:

The `post_process.py` script retrieves all the values from the `results.txt` file and plots $\rho(x)$, $\rho_a(x)$, and $a(x)$.