### Measured values for time of simulation = 50 and no threads = 5:

Number of persons	Serial Time	Parallel Time	Speedup
10000	6.870416	2.004984	3.426668741
20000	11.739932	2.791457	4.20566464
50000	30.903918	7.27573	4.247535024
100000	79.019194	18.865276	4.188605245

### Measured values for time of simulation = 100 and no threads = 5:

Number of persons	Serial Time	Parallel Time	Speedup
10000	15.534006	3.881418	4.002147153
20000	23.494015	6.011704	3.908045872
50000	56.04902	13.432767	4.172559533
100000	146.365199	34.007997	4.303846504

# Measured values for time of simulation = 150 and no threads = 5:

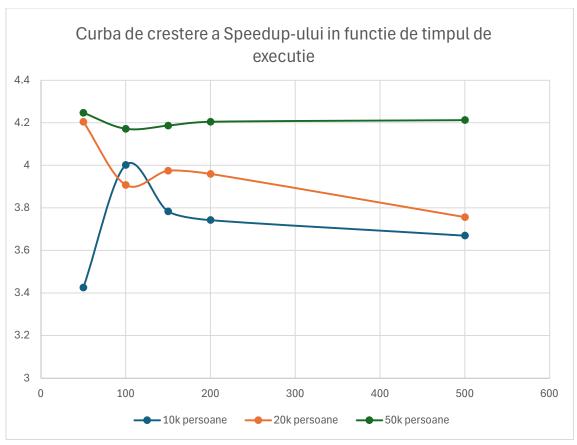
Number of persons	Serial Time	Parallel Time	Speedup
10000	22.447477	5.930747	3.784932488
20000	34.049772	8.564732	3.975579388
50000	81.145693	19.378422	4.18742522
100000	207.777647	47.925861	4.335397271

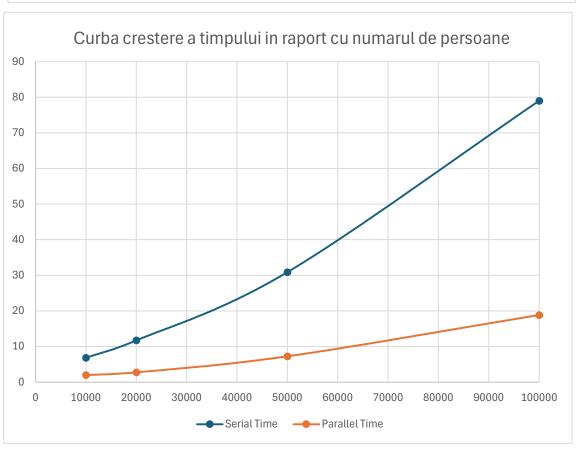
### Measured values for time of simulation = 200 and no threads = 5:

Number of persons	Serial Time	Parallel Time	Speedup
10000	28.639831	7.649859	3.743837762
20000	44.58955	11.257955	3.96071489
50000	108.224698	25.734541	4.205425618
100000	277.800114	62.823104	4.42194187

# Measured values for time of simulation = 500 and no threads = 5:

Number of persons	Serial Time	Parallel Time	Speedup
10000	71.492741	19.475219	3.670959541
20000	107.066515	28.494699	3.757418704
50000	256.903321	60.977428	4.213088833





## **OBSERVATII:**

Pe masura ce creste numarul de perosne implicit va creste si timpul de executie pentru ambele versiuni ale codului, atat versiunea paralela cat si cea secventiala sau seriala sunt influentate in mod direct de acest lucru, exemplu pentru acest lucru il reprezinta graficul 2.

De asemenea in graficul 2 se poate observa diferenta in rapiditatea cresterii timpului de executie in functie de metoda folosita, timpul serial converge mai rapid spre o valoare mare, iar timpul paralel converge mai lent spre valori mari ale timpului de executie.

In primul grafic se poate observa o usoara consecventa a speedup-ului in functie de timpul de simulare a procesului sau a epidemiei. Desi acesta prezinta mici spikeuri el tinde sa se reguleze catre o valoare optima.