**Laborator 1:**

- calitatea este calculata ca fiind diferenta intre capacitatea rucsacului si totalul greutatii solutiei

- cu cat calitatea este mai aproape de 0, cu atat este mai bine

|  |  |  |  |
| --- | --- | --- | --- |
| **Instanta** | **k** | **Best 10 rulari** | **Average 10 rulari** |
| rucsac-20.txt | 10 | 1 | 415 |
| rucsac-20.txt | 100 | 0 | 46.4767 |
| rucsac-20.txt | 1000 | 2 | 4.7 |
| rucsac-200.txt | 10 | 2237 | 1474.8 |
| rucsac-200.txt | 100 | 268 | 165 |
| rucsac-200.txt | 1000 | 5 | 9.21 |
| valori locale | 10 | 6 | 19.76 |
| valori locale | 100 | 0 | 1.99 |
| valori locale | 1000 | 0 | 0.19 |

Valori locale:

weights = [6, 3, 2, 4, 5, 8, 9, 2, 1, 3, 5, 3, 7, 8]  
values = [2, 2, 5, 9, 2, 2, 5, 9, 2, 2, 5, 9, 2, 1]  
numberOfObjects = 14  
backpackCapacity = 50

Observam cresterea preciziei cea mai buna din 10 rulari cu cresterea numarului de rulari in sine

**Random Hill Climbing**

|  |  |  |  |
| --- | --- | --- | --- |
| **Instanta** | **k** | **Best 10 rulari** | **Average 10 rulari** |
| rucsac-20.txt | 10 | 2 | 4.62 |
| rucsac-20.txt | 100 | 0 | 0.4818 |
| rucsac-20.txt | 1000 | 0 | 0.044859 |
| rucsac-200.txt | 10 | 3 | 3.61 |
| rucsac-200.txt | 100 | 0 | 0.316 |
| rucsac-200.txt | 1000 | 0 | 0.03 |
| valori locale | 10 | 0 | 0.71 |
| valori locale | 100 | 0 | 0.081 |
| valori locale | 1000 | 0 | 0.008 |