**Documentatie Lab4 PPD**

**Cerinta:**

**Text, application

Description automatically generated with medium confidence**

**Proiectare**

A picture containing graphical user interface

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**Implementare:**

* **Impart numarul de monomi in functie de cate thread-uri o sa am**
* **Creez un thread „Producator” care citeste toate monoamele din fisiere si le pune intr-o coada**
* **Creez p-1 (p-nr de thread-uri) thread-uri „Consumator” care primesc cate monoame trebuie sa primeasca de la producator**
* **Apoi thread-urile Consumator vor citi monoamele din coada, iar in cazul in care coada este goala insa nu s-au citit toate monoamele, consumatorii vor astepta sa se adauge un monom in coada.**
* **Cand un thread Consumator primeste un monom il adauga in lista inlantuita ordonata crescator**

**JAVA:**

|  |  |  |
| --- | --- | --- |
| **Tip** | **Nr Thread-uri** | **Timp Executie(milisecunde)** |
| **10 polinoame**  **Max grad: 1000**  **Max monoamen:100** | **secvential** | **21.3** |
| **4** | **9.3** |
| **6** | **8.1** |
| **8** | **8.9** |
| **5 polinoame**  **Max grad: 10000**  **Max monoamen:500** | **secvential** | **25.6** |
| **4** | **9.1** |
| **6** | **6.5** |
| **8** | **6.9** |

**Grafuri:**

* **10 Polinoame**

**Chart, line chart

Description automatically generated**

* **5 Polinoame**

**Chart, line chart

Description automatically generated**

**Observatii:**

* **Varianta secventiala este mult mai inceata**
* **De obicei cel mai bun timp are loc cand se folosesc 6 thread-uri(am 6 core-uri deci pare corect)**