

CODE CHALLENGE: Solve the Clump Finding Problem (restated below). You will need to make sure that your algorithm is efficient enough to handle a large dataset.

Clump Finding Problem: *Find patterns forming clumps in a string.*

Input: A string *Genome*, and integers k , L , and t .

Output: All distinct k -mers forming (L, t) -clumps in *Genome*.

Sample Input:

```
CGGACTCGACAGATGTGAAGAACGACAATGTGAAGACTCGACACGACAGAGTGAAGAGAAGAGGAAACATTGTAA
5 50 4
```

Sample Output:

```
CGACA GAAGA
```

Extra Dataset
