Experimentatie

**Statespace:**

2D: 3^(n-2)

3D: 5^(n-2)

Dit zijn de *theoretish* maximaal behaalbare verschillende vouwingen.

Deze statespace is als volgend bepaald:

2D kun je 3 verschillende kanten op vouwen en in 3D 5 verschillende kanten.

* 1 + 3

Dit kan daarna ook met welke aaneenvolgende aminozuren

* 1 + 3^(n)

Op de eerste twee aminozuren na, want die staan al vast...

* 1 + 3 ^(n-2)

|  |  |  |
| --- | --- | --- |
| **Keten** | **Statespace 2D** | **Statespace 3D** |
| **HHPHHHPHPHHHPH** | **531,442** | **244,140,625** |
| **HPHPPHHPHPPHPHHPPHPH** | **387,420,490** | **3 814 697 265 625** |
| **PPPHHPPHHPPPPPHHHHHHHPPHHPPPPHHPPHPP** | **16,677,181,699,666,570** | **582 076 609 134 674 072 265 625** |
| **HHPHPHPHPHHHHPHPPPHPPPHPPPPHPPPHPPPHPHHHHPHPHPHPHH** | **239,299,329,230,617,529,084** | **3 552 713 678 800 500 929 355 621 337 890 625** |
| **CPPCHPPCHPPCPPHHHHHHCCPCHPPCPCHPPHPC** | **16,677,181,699,666,570** | **582 076 609 134 674 072 265 625** |
| **HCPHPCPHPCHCHPHPPPHPPPHPPPPHPCPHPPPHPHHHCCHCHCHCHH** | **239,299,329,230,617,529,084** | **3 552 713 678 800 500 929 355 621 337 890 625** |
| **HCPHPHPHCHHHHPCCPPHPPPHPPPPCPPPHPPPHPHHHHCHPHPHPHH** | **239,299,329,230,617,529,084** | **3 552 713 678 800 500 929 355 621 337 890 625** |

**Score**

Berekening Upper-bound:

* 2D = (aantal H ) \* 1 + (aantal C ) \* 5
* 3D = (aantal H) **\* -** 1.5 **+** (aantal C) **\* -** 7.5

|  |  |  |
| --- | --- | --- |
| **Keten** | **Upper-bound 2D** | **Upper-bound 3D** |
| **HHPHHHPHPHHHPH** | **-10** | **-15** |
| **HPHPPHHPHPPHPHHPPHPH** | **-10** | **-15** |
| **PPPHHPPHHPPPPPHHHHHHHPPHHPPPPHHPPHPP** | **-16** | **-24** |
| **HHPHPHPHPHHHHPHPPPHPPPHPPPPHPPPHPPPHPHHHHPHPHPHPHH** | **-24** | **-32** |
| **PPCHHPPCHPPPPCHHHHCHHPPHHPPPPHHPPHPP** | **-34** | **-51** |
| **CPPCHPPCHPPCPPHHHHHHCCPCHPPCPCHPPHPC** | **-61** | **-91** |
| **HCPHPCPHPCHCHPHPPPHPPPHPPPPHPCPHPPPHPHHHCCHCHCHCHH** | **-69** | **-94** |
| **HCPHPHPHCHHHHPCCPPHPPPHPPPPCPPPHPPPHPHHHHCHPHPHPHH** | **-51** | **-75** |