DNA (reference) =

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | T | C | T | T | G | C | T | T | A | C | T | A | T |

Samle=

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| A | G | C | T | T |

נחפש את כל התאמות של מחרוזת הדגימה בתוך מחרוזת ההתייחסות עם חסם של 2 טעויות

(מצאנו במיקומים 0,5,10)

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | T | C | T | T | G | C | T | T | A | - | C | T | A | T |
| A | G | - | C | T | T |  | | | | | | | | | |
|  | | | | | A | G | C | T | T |  | | | | | |
|  | | | | | | | | | | A | G | C | T | - | T |

מיהי ההתאמה הטובה ביותר מבין כל ההתאמות שמצאנו?

התאמות

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **A** | **G** | T | **C** | **T** | **T** | **G** | **C** | **T** | **T** | **A** | - | **C** | **T** | A | **T** |
| **A** | **G** | - | **C** | **T** | **T** |  | | | | | | | | | |
|  | | | | | A | **G** | **C** | **T** | **T** |  | | | | | |
|  | | | | | | | | | | **A** | G | **C** | **T** | - | **T** |

אי התאמה

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | T | C | T | **T** | G | C | T | T | A | - | C | T | A | T |
| A | G | - | C | T | T |  | | | | | | | | | |
|  | | | | | **A** | G | C | T | T |  | | | | | |
|  | | | | | | | | | | A | G | C | T | - | T |

הוספה

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | T | C | T | T | G | C | T | T | A | **-** | C | T | A | T |
| A | G | - | C | T | T |  | | | | | | | | | |
|  | | | | | A | G | C | T | T |  | | | | | |
|  | | | | | | | | | | A | **G** | C | T | - | T |

מחיקה

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | **T** | C | T | T | G | C | T | T | A | - | C | T | **A** | T |
| A | G | **-** | C | T | T |  | | | | | | | | | |
|  | | | | | A | G | C | T | T |  | | | | | |
|  | | | | | | | | | | A | G | C | T | **-** | T |

פונקציית ההשוואה:

התאמה =2

אי התאמה =0

הוספה=-1

מחיקה=-1

נקבל

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | G | T | C | T | T | G | C | T | T | A | - | C | T | A | T |  | score |
| A | G | - | C | T | T |  | | | | | | | | | |  |  |
| +2 | +2 | -1 | +2 | +2 | +2 |  | | | | | | | | | |  | 9 |
|  | | | | | A | G | C | T | T |  | | | | | |  |  |
|  | | | | | +0 | +2 | +2 | +2 | +2 |  | | | | | |  | 8 |
|  | | | | | | | | | | A | G | C | T | - | T |  |  |
|  | | | | | | | | | | +2 | -1 | +2 | +2 | -1 | +2 |  | 6 |