Globally align the two sequences below and report the alignment and its score. Gap score = −1, match score = 1, mismatch score = −∞.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | A | T | T | A | C | G | A | G | C |
|  | 0 |  |  |  |  |  |  |  |  |  |
| A |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |
| G |  |  |  |  |  |  |  |  |  |  |
| G |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |

Locally align the two sequences below and report the alignment and its score. Gap score = −1, match score = 1, mismatch score = −∞.

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | A | T | T | A | C | G | A | G | C |
|  | 0 |  |  |  |  |  |  |  |  |  |
| A |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |
| G |  |  |  |  |  |  |  |  |  |  |
| G |  |  |  |  |  |  |  |  |  |  |
| C |  |  |  |  |  |  |  |  |  |  |