## Quiz 15. Sum-of-pair score for Multiple Alignment

The multiple alignment for 4 sequences is given in the following table:

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| S1=ACG | A | - | C | G |
| S2=AGT | A | - | G | T |
| S3=ACGT | A | C | G | T |
| S4=AGT | A | - | G | T |

1. Compute the sum-of-pairs score of a given multiple alignment:

SP score=

|  | S2 | S3 | S4 |
| :--- | :--- | :--- | :--- |
| S1 |  |  |  |
| S2 |  |  |  |
| S3 |  |  |  |

2. Can you produce an alignment with a better SP-score?

|  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| S1=ACG |  |  |  |  |
| S2=AGT |  |  |  |  |
| S3=ACGT |  |  |  |  |
| S4=AGT |  |  |  |  |

SP score=

|  | S2 | S3 | S4 |
| :--- | :--- | :--- | :--- |
| S1 |  |  |  |
| S2 |  |  |  |
| S3 |  |  |  |

