Arslan-Eğecioğlu-Pevzner Unit Tests

```
Hint:   Many test values are taken from project Algorithms
        for Bioninformatics of Alexander Mattheis or the lectures.
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Test 1 (used **modified** Smith-Waterman-Implementation (with floating point numbers) for calculation)

Input

```
Sequence A:       CTTGACCATU
Sequence B:       GCATTUGCCUU

Deletion:         -2
Insertion:        -1
Match:             3
Mismatch:         -1
Length:           10
```

Output (Round 1)

```
Score:            12
Alignment Length: 15
lambda:           0.48

Deletion:         -2.48
Insertion:        -2.48
Match:             2.04
Mismatch:         -1.96

Seq1    C_TT_GACC
        * ** * **
Seq2    CATTUG_CC

Seq1    C_TT_GACCATU
        * ** * ** |*
Seq2    CATTUG_CC_UU
```

		G	C	A	T	T	U	G	C	C	U	U
	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	3	1	0	0	0	0	3	3	1	0
T	0	0	1	2	4	3	1	0	1	2	2	0
T	0	0	0	0	5	7	5	3	1	0	1	1
G	0	3	1	0	3	5	6	8	6	4	2	0
A	0	1	2	4	2	3	4	6	7	5	3	1
C	0	0	4	2	3	1	2	4	9	10	8	6
C	0	0	3	3	1	2	0	2	7	12	10	8
A	0	0	1	6	4	2	1	0	5	10	11	9
T	0	0	0	4	9	7	5	3	3	8	9	10
U	0	0	0	2	7	8	10	8	6	6	11	12

```
Seq1    C_TT_GACCATU
        * ** * **| *
Seq2    CATTUG_CCU_U
```

Output (Round 2)

```
Score:              9
Alignment Length: 6
lambda:             0.5625

Deletion:           -2.5625
Insertion:          -2.5625
Match:               1.875
Mismatch:           -2.125

Seq1    CAT
        ***
Seq2    CAT
```

		G	C	A	T	T	U	G	C	C	U	U
	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	2.04	0	0	0	0	0	2.04	2.04	0	0
T	0	0	0	0.08	2.04	2.04	0	0	0	0.08	0.08	0
T	0	0	0	0	2.12	4.08	1.6	0	0	0	0	0
G	0	2.04	0	0	0	1.6	2.12	3.64	1.16	0	0	0
A	0	0	0.08	2.04	0	0	0	1.16	1.68	0	0	0
C	0	0	2.04	0	0.08	0	0	0	3.2	3.72	1.24	0
C	0	0	2.04	0.08	0	0	0	0	2.04	5.24	2.76	0.28
A	0	0	0	4.08	1.6	0	0	0	0	2.76	3.28	0.8
T	0	0	0	1.6	6.12	3.64	1.16	0	0	0.28	0.8	1.32
U	0	0	0	0	3.64	4.16	5.68	3.2	0.72	0	2.32	2.84

Output (Round 3)

```
Score:              9
Alignment Length: 6
lambda:             0.5625

Deletion:           -2.5625
Insertion:          -2.5625
Match:               1.875
Mismatch:           -2.125

Seq1    CAT
        ***
Seq2    CAT
```

		G	C	A	T	T	U	G	C	C	U	U
	0	0	0	0	0	0	0	0	0	0	0	0
C	0	0	1.875	0	0	0	0	0	1.875	1.875	0	0
T	0	0	0	0	1.875	1.875	0	0	0	0	0	0
T	0	0	0	0	1.875	3.75	1.1875	0	0	0	0	0
G	0	1.875	0	0	0	1.1875	1625	3.0625	0.5	0	0	0
A	0	0	0	1.875	0	0	0	0.5	0.9375	0	0	0
C	0	0	1.875	0	0	0	0	0	2.375	2.8125	0.25	0
C	0	0	1.875	0	0	0	0	0	1.875	4.25	1.6875	0
A	0	0	0	3.75	1.1875	0	0	0	0	1.6875	2.125	0
T	0	0	0	1.1875	5625	3.0625	0.5	0	0	0	0	0
U	0	0	0	0	3.0625	3.5	4.9375	2.375	0	0	1.875	1.875