



恭喜！您通过了！

下一项



1 / 1 分

1. For the string $S = AACGATAGCGGTAGA\$$, what will be the contents of array *order* after *SortCharacters*?

- ☐ [0,1,4,6,12,14,2,8,3,7,9,10,13,5,11,15]
- ☐ [15,14,0,1,12,6,4,2,8,13,3,7,9,10,11,5]
- ☒ [15,0,1,4,6,12,14,2,8,3,7,9,10,13,5,11]
- ☐ [0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15]

正确

Correct! First goes '\$', then all 'A's in order, then all 'C's in order, then all 'G's in order, then all 'T's in order.



1 / 1 分

2. For string $S = AACGATAGCGGTAGA\$$, what will be the contents of the array *class* after *ComputeCharClasses*?

- ☐ [0,0,0,0,0,0,0,0,0,0,0,0,0,0,0]
- ☐ [0,0,1,2,0,3,0,2,1,2,2,3,0,2,0,4]
- ☒ [1,1,2,3,1,4,1,3,2,3,3,4,1,3,1,0]

正确

Correct! Class 0 is for '\$', class 1 is for 'A', class 2 is for 'C', class 3 is for 'G', class 4 is for 'T'.



1 / 1 分

3. For string $S = AACGATAGCGGTAGA\$$, what will be the order of cyclic shifts of length 2 ordered by the second character in ascending order?

- ☐ \$A, A\$, AA, AC, AG, AG, AT, CG, CG, GA, GA, GC, GG, GT, TA, TA
- ☒ A\$, \$A, AA, GA, TA, TA, GA, AC, GC, CG, AG, CG, GG, AG, AT, GT
- ☐ \$A, AA, AC, AT, AG, AG, A\$, CG, CG, GA, GC, GG, GT, GA, TA, TA
- ☐ \$A, AA, GA, TA, TA, GA, AC, GC, CG, AG, CG, GG, AG, AT, GT, A\$

正确

Correct!



1 / 1 分

4. For string $S = AACGATAGCGGTAGA\$$, what will be the order of cyclic shifts of length 2 after *SortDoubled* with $L = 1$?

- ☒ [15,14,0,1,6,12,4,2,8,3,13,7,9,10,5,11]
- ☐ [14,0,1,6,12,4,2,8,3,13,7,9,10,5,11,15]
- ☐ [15,14,0,1,12,6,4,2,8,13,3,7,9,10,11,5]

正确

Correct! Recall that *SortDoubled* uses a stable sort by first halves of the doubled cyclic shifts.



1 / 1 分

5. For string $S = AACGATAGCGGTAGA\$$, what will be the contents of the array *class* for the cyclic shifts of length 2 after *UpdateClasses*?

- ☐ [0,0,0,0,0,0,0,0,0,0,0,0,0,0,0]
- ☐ [0,1,2,3,4,5,6,7,2,8,9,5,6,3,10,11]
- ☐ [2,3,7,9,6,14,4,11,8,12,13,15,5,10,1,0]
- ☒ [2,3,6,7,5,11,4,8,6,9,10,11,4,7,1,0]

正确

Correct! The classes are [\$A], [A\$], [AA], [AC], [AG, AG], [AT], [CG, CG], [GA, GA], [GC], [GG], [GT], [TA, TA].



1 / 1 分

6. For string $S = AACGATAGCGGTAGA\$$, what will be the suffix array?

- ☒ [15,14,0,1,12,6,4,2,8,13,3,7,9,10,11,5]
- ☐ [0,1,2,3,4,5,6,7,8,9,10,11,12,13,14,15]
- ☐ [15,0,1,4,6,12,14,2,8,3,7,9,10,13,5,11]
- ☐ [1,1,2,3,1,4,1,3,2,3,3,4,1,3,1,0]

正确

Correct! Sorted suffixes:

15 \$
14 A\$
0 AACGATAGCGGTAGA\$
1 ACGATAGCGGTAGA\$
12 AGA\$
6 AGCGGTAGA\$
4 ATAGCGGTAGA\$
2 CGATAGCGGTAGA\$
8 CGGTAGA\$
13 GA\$
3 GATAGCGGTAGA\$
7 GCGGTAGA\$
9 GGTTAGA\$
10 GTAGA\$
11 TAGA\$
5 TAGCGGTAGA\$