```
                                        10        20        30        40        50        60        70        80        90
                                        TCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGA
G0283566-3.seq(1>5728)   →              TCGCGCGTTTCGGTGATGACGGTGAAAACCTCTGACACATGCAGCTCCCGGAGACGGTCACAGCTTGTCTGTAAGCGGATGCCGGGAGCAGA

                                       100       110       120       130       140       150       160       170       180
                                        CAAGCCCGTCAGGGCGCGTCAGCGGGTGTTGGCGGGTGTCGGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCA
G0283566-3.seq(1>5728)   →              CAAGCCCGTCAGGGCGCGTCAGCGGGTGTTGGCGGGTGTCGGGGCTGGCTTAACTATGCGGCATCAGAGCAGATTGTACTGAGAGTGCACCA

                                       190       200       210       220       230       240       250       260       270
                                        TACCACAGCTTTTCAATTCAATTCATCATTTTTTTTTTATTCTTTTTTTTGATTTCGGTTTCTTTGAAATTTTTTTGATTCGGTAATCTCCG
G0283566-3.seq(1>5728)   →              TACCACAGCTTTTCAATTCAATTCATCATTTTTTTTTTATTCTTTTTTTTGATTTCGGTTTCTTTGAAATTTTTTTGATTCGGTAATCTCCG

                                       280       290       300       310       320       330       340       350       360
                                        AACAGAAGGAAGAACGAAGGAAGGAGCACAGACTTAGATTGGTATATATACGCATATGTAGTGTTGAAGAAACATGAAATTGCCCAGTATTC
G0283566-3.seq(1>5728)   →              AACAGAAGGAAGAACGAAGGAAGGAGCACAGACTTAGATTGGTATATATACGCATATGTAGTGTTGAAGAAACATGAAATTGCCCAGTATTC

                                       370       380       390       400       410       420       430       440       450       460
                                        TTAACCCAACTGCACAGAACAAAAACCTGCAGGAAACGAAGATAAATCATGTCGAAAGCTACATATAAGGAACGTGCTGCTACTCATCCTAG
G0283566-3.seq(1>5728)   →              TTAACCCAACTGCACAGAACAAAAACCTGCAGGAAACGAAGATAAATCATGTCGAAAGCTACATATAAGGAACGTGCTGCTACTCATCCTAG

                                       470       480       490       500       510       520       530       540       550
                                        TCCTGTTGCTGCCAAGCTATTTAATATCATGCACGAAAAGCAAACAAACTTGTGTGCTTCATTGGATGTTCGTACCACCAAGGAATTACTGG
G0283566-3.seq(1>5728)   →              TCCTGTTGCTGCCAAGCTATTTAATATCATGCACGAAAAGCAAACAAACTTGTGTGCTTCATTGGATGTTCGTACCACCAAGGAATTACTGG

                                       560       570       580       590       600       610       620       630       640
                                        AGTTAGTTGAAGCATTAGGTCCCAAAATTTGTTTACTAAAAACACATGTGGATATCTTGACTGATTTTTCCATGGAGGGCACAGTTAAGCCG
G0283566-3.seq(1>5728)   →              AGTTAGTTGAAGCATTAGGTCCCAAAATTTGTTTACTAAAAACACATGTGGATATCTTGACTGATTTTTCCATGGAGGGCACAGTTAAGCCG

                                       650       660       670       680       690       700       710       720       730
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G0283566-3.seq(1>5728)   →              CTAAAGGCATTATCCGCCAAGTACAATTTTTTACTCTTCGAAGACAGAAAATTTGCTGACATTGGTAATACAGTCAAATTGCAGTACTCTGC

                                       740       750       760       770       780       790       800       810       820
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G0283566-3.seq(1>5728)   →              GGGTGTATACAGAATAGCAGAATGGGCAGACATTACGAATGCACACGGTGTGGTGGGCCCAGGTATTGTTAGCGGTTTGAAGCAGGCGGCAG

                                       830       840       850       860       870       880       890       900       910       920
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G0283566-3.seq(1>5728)   →              AAGAAGTAACAAAGGAACCTAGAGGCCTTTTGATGTTAGCAGAATTGTCATGCAAGGGCTCCCTATCTACTGGAGAATATACTAAGGGTACT

                                       930       940       950       960       970       980       990      1000      1010
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G0283566-3.seq(1>5728)   →              GTTGACATTGCGAAGAGCGACAAAGATTTTGTTATCGGCTTTATTGCTCAAAGAGACATGGGTGGAAGAGATGAAGGTTACGATTGGTTGAT

                                      1020      1030      1040      1050      1060      1070      1080      1090      1100
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                                      1110      1120      1130      1140      1150      1160      1170      1180      1190
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                                      1200      1210      1220      1230      1240      1250      1260      1270      1280
                                        AGAAGATGCGGCCAGCAAAACTAAAAAACTGTATTATAAGTAAATGCATGTATACTAAACTCACAAATTAGAGCTTCAATTTAATTATATCA
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                                      1290      1300      1310      1320      1330      1340      1350      1360      1370      1380
                                        GTTATTACCCTATGCGGTGTGAAATACCGCACAGATGCGTAAGGAGAAAATACCGCATCAGGAAATTGTAAACGTTAATATTTTGTTAAAAT
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                                      1390      1400      1410      1420      1430      1440      1450      1460      1470
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1480 1490 1500 1510 1520 1530 1540 1550 1560

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1570 1580 1590 1600 1610 1620 1630 1640 1650

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1660 1670 1680 1690 1700 1710 1720 1730 1740

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1750 1760 1770 1780 1790 1800 1810 1820 1830 1840

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1850 1860 1870 1880 1890 1900 1910 1920 1930

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1940 1950 1960 1970 1980 1990 2000 2010 2020

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2030 2040 2050 2060 2070 2080 2090 2100 2110

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2120 2130 2140 2150 2160 2170 2180 2190 2200

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2210 2220 2230 2240 2250 2260 2270 2280 2290 2300

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2490 2500 2510 2520 2530 2540 2550 2560 2570

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2580 2590 2600 2610 2620 2630 2640 2650 2660

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2670 2680 2690 2700 2710 2720 2730 2740 2750 2760

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G0283566-3.seq(1>5728) → GAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCAT
ZA01-E67596-G0283566-3_M13F-77.ab1(1>790) → GAAGCTCCCTCGTGCGCTCTCCTGTTCCGACCCTGCCGCTTACCGGATACCTGTCCGCCTTTCTCCCTTCGGGAAGCGTGGCGCTTTCTCAT

2770 2780 2790 2800 2810 2820 2830 2840 2850

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G0283566-3.seq(1>5728) → AGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTCGTTCGCTCCAAGCTGGGCTGTGTGCACGAACCCCCCGTTCAGCCCGACCGCTGCGC
ZA01-E67596-G0283566-3_M13F-77.ab1(1>790) → AGCTCACGCTGTAGGTATCTCAGTTCGGTGTAGGTC

2860 2870 2880 2890 2900 2910 2920 2930 2940

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2950 2960 2970 2980 2990 3000 3010 3020 3030

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3040 3050 3060 3070 3080 3090 3100 3110 3120

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3130 3140 3150 3160 3170 3180 3190 3200 3210 3220

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3230 3240 3250 3260 3270 3280 3290 3300 3310

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3320 3330 3340 3350 3360 3370 3380 3390 3400

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3410 3420 3430 3440 3450 3460 3470 3480 3490

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3500 3510 3520 3530 3540 3550 3560 3570 3580

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3590 3600 3610 3620 3630 3640 3650 3660 3670 3680

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3690 3700 3710 3720 3730 3740 3750 3760 3770

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3780 3790 3800 3810 3820 3830 3840 3850 3860

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3870 3880 3890 3900 3910 3920 3930 3940 3950

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3960 3970 3980 3990 4000 4010 4020 4030 4040

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4050 4060 4070 4080 4090 4100 4110 4120 4130 4140

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4150 4160 4170 4180 4190 4200 4210 4220 4230

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4330 4340 4350 4360 4370 4380 4390 4400 4410

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4420 4430 4440 4450 4460 4470 4480 4490 4500

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4510 4520 4530 4540 4550 4560 4570 4580 4590 4600

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4610 4620 4630 4640 4650 4660 4670 4680 4690

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4700 4710 4720 4730 4740 4750 4760 4770 4780

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4790 4800 4810 4820 4830 4840 4850 4860 4870

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G0283566-3.seq(1>5728) → ACTGATTACTAGCGAAGCTGCGGGTGCATTTTTTCAAGATAAAGGCATCCCCGATTATATTCTATACCGATGTGGATTGCGCATACTTTGTG

4880 4890 4900 4910 4920 4930 4940 4950 4960

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4970 4980 4990 5000 5010 5020 5030 5040 5050 5060

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5070 5080 5090 5100 5110 5120 5130 5140 5150

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5160 5170 5180 5190 5200 5210 5220 5230 5240

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5250 5260 5270 5280 5290 5300 5310 5320 5330

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5340 5350 5360 5370 5380 5390 5400 5410 5420

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5430 5440 5450 5460 5470 5480 5490 5500 5510 5520

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G0283566-3.seq(1>5728) → TATATACATGAGAAGAACGGCATAGTGCGTGTTTATGCTTAAATGCGTACTTATATGCGTCTATTTATGTAGGATGAAAGGTAGTCTAGTAC

5530 5540 5550 5560 5570 5580 5590 5600 5610

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G0283566-3.seq(1>5728) → CTCCTGTGATATTATCCCATTCCATGCGGGGTATCGTATGCTTCCTTCAGCACTACCCTTTAGCTGTTCTATATGCTGCCACTCCTCAATTG

5620 5630 5640 5650 5660 5670 5680 5690 5700

GATTAGTCTCATCCTTCAATGCTATCATTTCCTTTGATATTGGATCATACTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGG

G0283566-3.seq(1>5728) → GATTAGTCTCATCCTTCAATGCTATCATTTCCTTTGATATTGGATCATACTAAGAAACCATTATTATCATGACATTAACCTATAAAAATAGG

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                                                  5710      5720
                                                  CGTATCACGAGGCCCTTTCGTC
G0283566-3.seq(1>5728)                      →     CGTATCACGAGGCCCTTTCGTC
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