```
                                 ((((..(((......(((.((.....)).)))((((((.......)))))).)((.....
chr-A6.trna94-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGUCAGAUUUAGGCUCUGG-UCC----G 48
chr-A10.trna32-Leu-TAG   GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A3.trna128-Leu-TAG   GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A9.trna52-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A5.trna80-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCCCUGG-UCC----G 48
chr-A7.trna64-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A1.trna66-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A6.trna14-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A6.trna95-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A5.trna56-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A3.trna58-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A9.trna36-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A7.trna65-Leu-TAG    GACA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A8.trna63-Leu-TAG    GACG--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A8.trna123-Leu-TAG   GAUA--GUU----UGGCCGAG-UGGUCUAAGGCGCCAGAUUUAGGCUCUGG-UCC----G 48
chr-A9.trna109-Leu-CAG   GUCA--AGA----UGGCCGAG-UGGUCUAAGGCGCCAGUUUCAGGUACUGG-UCC----G 48
chr-A1.trna14-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A1.trna56-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A8.trna118-Leu-CAG   GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A3.trna71-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A3.trna77-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A8.trna13-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCCGCUUCAGGUGCGGG-UCC----G 49
chr-A4.trna24-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCC----G 49
chr-A2.trna81-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCC----G 49
chr-A9.trna182-Leu-AAG   GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCC----G 49
chr-A6.trna44-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCC----G 49
chr-A7.trna38-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCC----G 49
chr-A7.trna47-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A2.trna9-Leu-AAG     GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A2.trna67-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A6.trna32-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A10.trna50-Leu-AAG   GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A2.trna99-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A3.trna6-Leu-AAG     GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A3.trna55-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A10.trna33-Leu-AAG   GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A7.trna26-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A5.trna50-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A9.trna19-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A9.trna62-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A3.trna129-Leu-AAG   GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A4.trna11-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A4.trna27-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A9.trna72-Leu-AAG    GUUG--AUA----UGGCCGAGUUGGUCUAAGGCGCCAGAUUAAGGUUCUGG-UCC----G 49
chr-A6.trna21-Leu-CAG    GUCA--AGA----UGGCCGAGUUGGUCUAAGGCGCCAGUUUCAGGUACUGG-UCC----G 49
chr-A2.trna82-Leu-AAG    GCCAACAUA----UGGCCGAGUUGGUCUAAGGCGCAGGAUUAAGGUUCCUG-UCA----G 51
chr-A4.trna12-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCCAAGGCGCCAGACUCAAGUUCUGG-UCCUCGAA 52
chr-A9.trna42-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCCAAGGCGCCAGACUCAAGUUCUGG-UCCUCGAA 52
chr-A3.trna101-Leu-CAA   GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCCUCGUA 52
chr-A5.trna26-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCCUCGUA 52
chr-A8.trna23-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAG 52
chr-A9.trna168-Leu-CAA   GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAG 52
chr-A10.trna29-Leu-CAA   GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAG 52
chr-A1.trna59-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAA 52
chr-A2.trna7-Leu-CAA     GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAA 52
chr-A4.trna28-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAA 52
chr-A5.trna77-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAA 52
chr-A8.trna37-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCUUCGAA 52
chr-A1.trna8-Leu-CAA     GUCA--GGG----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCCUCGUG 52
chr-A8.trna25-Leu-CAA    GUCA--GGG----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCCUCGUG 52
chr-A2.trna76-Leu-CAA    GUCA--GGG----UGGCCGAG-UGGUCUAAGGCGCCAGACUCAAGUUCUGG-UCCUCGUA 52
chr-A6.trna83-Leu-CAA    GUCA--GGA----UGGCCGAG-UGGUCUAAG--GCCAGACUCAAGUUCUGG-UCUUCGAA 50
chr-A2.trna4-Leu-TAA     GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A3.trna2-Leu-TAA     GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A3.trna108-Leu-TAA   GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A5.trna9-Leu-TAA     GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A10.trna40-Leu-TAA   GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A7.trna91-Leu-TAA    GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A9.trna130-Leu-TAA   GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A8.trna74-Leu-TAA    GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A4.trna43-Leu-TAA    GCAG--GUU----UGCCCGAG-UGGU-UAAGGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A9.trna124-Leu-TAA   GCAG--GUU----UGCCCGAG-AGGU-UAAUGGGGAAGACUUAAGUUCUUC-UGCACAUA 51
chr-A3.trna72-Leu-TAA    GGAG--AGA----UGGCCGAG-UGGUUGAUGGCUCCGGUCUUAAAAACCGGUAUAGUUCA 53
chr-A6.trna16-Leu-GAG    AACC--AAGUGGCUGGUAGUAGUGGUUA-GUACCCCACGUUGAGGCCGUGGAGACG---- 53
                                  .........10........20........30........40........50.........
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                                  ...........)).(((((.......)))))))))))).
chr-A6.trna94-Leu-TAG    --------CAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A10.trna32-Leu-TAG   --------CAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A3.trna128-Leu-TAG   --------CAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A9.trna52-Leu-TAG    --------CAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A5.trna80-Leu-TAG    --------CAAGGGCGUGAGGUUCAAAUCCCACAGCUGUCA 80
chr-A7.trna64-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A1.trna66-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A6.trna14-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A6.trna95-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A5.trna56-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A3.trna58-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A9.trna36-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A7.trna65-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A8.trna63-Leu-TAG    --------AAAGGGCGUGGGGUUCAAAUCCCACAGCCGUCA 80
chr-A8.trna123-Leu-TAG   --------AAAGGGCGUGGGGUUCAAAUCCCACAGCUGUCA 80
chr-A9.trna109-Leu-CAG   --------AAAGGGCGUGGGGUUCGAACCCCACUCUUGACA 80
chr-A1.trna14-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A1.trna56-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A8.trna118-Leu-CAG   --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A3.trna71-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A3.trna77-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A8.trna13-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUCUUGACA 81
chr-A4.trna24-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAGCCCACUGUCAACA 81
chr-A2.trna81-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A9.trna182-Leu-AAG   --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A6.trna44-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A7.trna38-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A7.trna47-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A2.trna9-Leu-AAG     --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A2.trna67-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A6.trna32-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A10.trna50-Leu-AAG   --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A2.trna99-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A3.trna6-Leu-AAG     --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A3.trna55-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A10.trna33-Leu-AAG   --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A7.trna26-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A5.trna50-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A9.trna19-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A9.trna62-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A3.trna129-Leu-AAG   --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A4.trna11-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A4.trna27-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 81
chr-A9.trna72-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGCCAACA 81
chr-A6.trna21-Leu-CAG    --------AAAGGGCGUGGGGUUCAAAUACCACUCUUGACA 81
chr-A2.trna82-Leu-AAG    --------AAAGGGCGUGGGGUUCAAAUCCCACUGUCAACA 83
chr-A4.trna12-Leu-CAA    --------AGAGGGCGUGGGGUUCAAACCCCACUUCUGACA 84
chr-A9.trna42-Leu-CAA    --------AGAGGGCGUGGGGUUCAAACCCCACUUCUGACA 84
chr-A3.trna101-Leu-CAA   --------AGAGGGCGUGGGGUUCAAACCCCACUUCUGACA 84
chr-A5.trna26-Leu-CAA    --------AGAGGGCGUGGGGUUCAAACCCCACUUCUGACA 84
chr-A8.trna23-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A9.trna168-Leu-CAA   --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A10.trna29-Leu-CAA   --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A1.trna59-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A2.trna7-Leu-CAA     --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A4.trna28-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A5.trna77-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A8.trna37-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A1.trna8-Leu-CAA     --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A8.trna25-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 84
chr-A2.trna76-Leu-CAA    --------AGAGGGCGUGGGGUUCACAUCCCACUUCUGACA 84
chr-A6.trna83-Leu-CAA    --------AGAGGGCGUGGGGUUCAAAUCCCACUUCUGACA 82
chr-A2.trna4-Leu-TAA     --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A3.trna2-Leu-TAA     --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A3.trna108-Leu-TAA   --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A5.trna9-Leu-TAA     --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A10.trna40-Leu-TAA   --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A7.trna91-Leu-TAA    --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A9.trna130-Leu-TAA   --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A8.trna74-Leu-TAA    --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A4.trna43-Leu-TAA    --------AAUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A9.trna124-Leu-TAA   --------AGUGCGCGUGGGGUUCGAACCCCACAGCCUGCA 83
chr-A3.trna72-Leu-TAA    UAAAAAAUAACUAUCGAGGGUUCGAAUCCCUCUCUCUCCU 93
chr-A6.trna16-Leu-GAG    --------UGAGUUCG-AUUCUCGCCUUUCACCUUGGUUA 84
                                  .........70........80........90.........
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