```
                                .(((((((..((((.........)))).(((((.......)))))).....(((((.....
chr-4.trna342-Arg-CCT   ---CCAC--UGCUCAGUUGA-UAAAGCACAAACCUCCUAACCUUGUGGAUGUGGGUUCAA 54
chr-5.trna3-Arg-CCT     ---UGU---AGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 53
chr-5.trna505-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-5.trna242-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-5.trna241-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-5.trna240-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-5.trna522-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-5.trna523-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-4.trna383-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-6.trna187-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGCCGUAGGUUCGA 58
chr-1.trna177-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAAGUCGUAGGUUCGA 58
chr-1.trna280-Arg-CCT   -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCUGUUUCCUAAGCAGAAAGUCGUAGGUUCGA 58
chr-5.trna18-Arg-CCT    -GCGCCUGUAGCUCAGUGGA-UAGAGCGUCCGUUUCCUAAGCGGAAGGUCGUAGGUUCGA 58
chr-4.trna357-Arg-CCT   -GCGCUUGUAGCUCAGUGGA-UAGAGCAUUUGUUUCCUAAACAAAAAGUCGAAGGUUCGA 58
chr-3.trna171-Arg-CCG   -GGUCAUAUAGCGAAGUGGA-UAUCGCGUUAGAUUCCGAAUCUAUAGGUCGUGGGUUCGA 58
chr-1.trna39-Arg-TCG    -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-2.trna12-Arg-TCG    -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-3.trna247-Arg-TCG   -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-3.trna267-Arg-TCG   -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-3.trna268-Arg-TCG   -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-1.trna23-Arg-TCG    -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-4.trna119-Arg-TCG   -GACGCAUAGCGCAGUGGAUUAGCGCGUCUGACUUCGGAUCAGAAGGUCGUGGGUUCGA 59
chr-1.trna313-Arg-TCT   -GCGCUCGUGGCCUAAUGGA-CAAGGCAUUUGACUUCUAAUCAAAGGAUUGUGGGUUCGA 58
chr-7.trna340-Arg-TCT   -GCGCUCGUGGCCUAAUGGA-CAAGGCAUUUGACUUCUAAUCAAAGGAUUGUGGGUUCGA 58
chr-4.trna344-Arg-TCT   -GCGCUCGUGGCCUAAUGGA-UAAGGCAUUUGACUUCUAAUCAAAGGAUUGUGGGUUCGA 58
chr-7.trna300-Arg-TCT   -GCGCUCGUGGCCUAAUGGA-UAAGGCAUUUGACUUCUAAUCAAAGGAUUGUGGGUUCGA 58
chr-3.trna296-Arg-TCT   -GCGCCGUGGCCUAAUGGA-UAAGGCGUCUGACUUCUAAUCAGGCGAUUGUGGGUUCGA 58
chr-3.trna379-Arg-TCT   -GCGCCCAUGGCCUAAUGGA-UAAGGCGUCUGACUUCUAAUCAGGCGAUUGUGGGUUCGA 58
chr-4.trna39-Arg-TCT    -GCGCCCGUGGCCUAAUGGA-UAAGGCGUUUGACUUCUAAUCAAGCGAUUGUGGGUUCGA 58
chr-5.trna330-Arg-CCG   -GACGCGUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-2.trna269-Arg-CCG   -GACGCGUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-2.trna315-Arg-CCG   -GACGCGUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-3.trna480-Arg-CCG   -GACGCGUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-7.trna268-Arg-CCG   -GGUCGCAUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-7.trna214-Arg-CCG   -GGUCGCAUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-7.trna213-Arg-CCG   -GGUCGCAUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUCGA 58
chr-7.trna367-Arg-CCG   -GACGCGUGGCCUAAUGGA-UAAGGCGCUCGCCUCCGGAGCGGGAGAUUCUGGGUUUGA 58
chr-1.trna307-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-1.trna269-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-1.trna308-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-1.trna309-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-1.trna350-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-1.trna351-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-2.trna129-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-2.trna135-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-3.trna137-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-6.trna363-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-4.trna161-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-5.trna192-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUUUGGGUUCGA 58
chr-6.trna24-Arg-ACG    -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCUA 58
chr-7.trna2-Arg-ACG     -GACCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-3.trna150-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGUCGGUCUACGAAACCAGAGAUUCUGGGUUUGA 58
chr-3.trna138-Arg-ACG   -GACUCCGUGGCCCAAUGGA-UAAGGCGCUGGUCUACGAAACCAGAGAUUCUGGGUUCGA 58
chr-5.trna520-Arg-TCT   -GCGUCCAUUGUCUAAUGGA-UAGGAAAGAGGUCUUCUAAACCUUUGGU-AUAGGUUCGA 57
chr-3.trna169-Arg-TCT   -GCGUCCAUUGUCUAAUGGA-UAGGAGAGAGGUCUUCUAAACCUUUGGU-AUAGGUUCGA 57
chr-1.trna479-Arg-TCT   -GCGUCCAUUGUCUAAUGGA-UAGGACAGAGGUCUUCUAAACGUUUGGU-AUAGGUUCAA 57
chr-1.trna51-Arg-TCT    -GCGUCCAUUGUCUAAUGGA-UAAGACAGAGGUCUUCUAAACCUUUGGU-GUAGGUUCAA 57
chr-1.trna473-Arg-TCT   -GCGUCCAUUGUCUAAUGGA-UAGGACAAAGGUCUUCUAAACCUUUGGU-AUAGGUUCAA 57
chr-4.trna370-Arg-TCT   -GCGUCCAUUGUCUAAUGGA-UAGGACAAAGGUCUUCUAAACCUUUGGU-AUAGGUUCAA 57
chr-5.trna150-Arg-TCT   -GCAUCCCUUGUCUAAUGGA-UAGGUCAGAGGUCUUCUAAACCUUUGGU-AUAGGUUCAA 57
chr-1.trna524-Arg-TCT   -GCGUCCAUUGUGUAAUGGA-UAGGACAGAGGUCUUCUAAACCUUUGGU-AUAGGUUCAA 57
chr-3.trna456-Arg-TCT   AGCGUCCAUUGUCUAAUGGA-UAGGACAGAGGUCUUCUAAACCUUUGGU-AUAGGUUCAA 58
chr-3.trna537-Arg-ACG   -GGGCCUGUAGCUCAGAGGAUUAGAGCACGUGGCUACGAACCAUGGUGUCGAGGGUUCGA 59
chr-3.trna91-Arg-ACG    -GGGCCAGUAGCUCAGAGGAUUAGAGCACGUGGCUACGAAGCACGGUGUCGGGGGUUCGA 59
chr-3.trna213-Arg-ACG   -GGGCCUGUAGCUUAGAGGAUUAGAGCACGUGGCUACGAACCACGGUGUCGGGGGUUCGA 59
chr-5.trna180-Arg-ACG   -GGGCCUGUAGCUCAGAGGAUUAGAGCAUGUGGCUACGAACCACGGUGUCGGGGGUUCAA 59
chr-2.trna114-Arg-ACG   -AGGCCUGUAGCUCAGAGGAUUAGAGCACGUGGCUACGAACCACGAUGUCGGGGGUUCAA 59
chr-3.trna40-Arg-GCG    AUGUGAGUCAACUCCGUGG--UAGAGCAAUUGACUGCGGAUCAAUAGGUCACCGGUUCGA 58
                                .........10........20........30........40........50.........
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                                ..)))))).....)))))))..
chr-4.trna342-Arg-CCT   GACCCCAU-----GAUGGGG-G 69
chr-5.trna3-Arg-CCT     CCCCUAC-----CAACAAA-A 68
chr-5.trna505-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna242-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna241-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna240-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna522-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna523-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-4.trna383-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-6.trna187-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-1.trna177-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-1.trna280-Arg-CCT   CCCCUAC-----CUGGCGC-G 73
chr-5.trna18-Arg-CCT    CCCCUAC-----CUGGCGC-G 73
chr-4.trna357-Arg-CCT   UCCCUUC-----CUAGCGC-A 73
chr-3.trna171-Arg-CCG   AUCCCAC-----UAUGAUC-A 73
chr-1.trna39-Arg-TCG    CUCCCAC-----UGUGGUC-G 74
chr-2.trna12-Arg-TCG    CUCCCAC-----UGUGGUC-G 74
chr-3.trna247-Arg-TCG   CUCCCAC-----UGUGGUC-G 74
chr-3.trna267-Arg-TCG   CUCCCAC-----UGUGGUC-G 74
chr-3.trna268-Arg-TCG   CUCCCAC-----UGUGGUC-G 74
chr-1.trna23-Arg-TCG    CUCCCAC-----UGUGGUC-G 74
chr-4.trna119-Arg-TCG   CUCCCAC-----UGUGGUC-G 74
chr-1.trna313-Arg-TCT   GUCCCAC-----CGAGCGU-G 73
chr-7.trna340-Arg-TCT   GUCCCAC-----CGAGCGU-G 73
chr-4.trna344-Arg-TCT   GUCCCAC-----CGAGCGU-G 73
chr-7.trna300-Arg-TCT   CUCCCAC-----CGAGCGU-G 73
chr-3.trna296-Arg-TCT   GUCCCAC-----CGGGCGU-G 73
chr-3.trna379-Arg-TCT   GUCCCAC-----UGGGCGU-G 73
chr-4.trna39-Arg-TCT    GUCCCAC-----CGGGCGU-G 73
chr-5.trna330-Arg-CCG   GUCCCAG-----CGUGGUC-G 73
chr-2.trna269-Arg-CCG   GUCCCAG-----CGUGGUC-G 73
chr-2.trna315-Arg-CCG   GUCCCAG-----CGUGGUC-G 73
chr-3.trna480-Arg-CCG   GUCCCAG-----CGUGGUC-G 73
chr-7.trna268-Arg-CCG   GUCCCAG-----UGUGAUC-G 73
chr-7.trna214-Arg-CCG   GUCCCAG-----UGUGAUC-G 73
chr-7.trna213-Arg-CCG   GUCCCAG-----UGUGAUC-G 73
chr-7.trna367-Arg-CCG   GUCCCAG-----CGUGGUC-G 73
chr-1.trna307-Arg-ACG   UCCCCAG-----CGGAGUU-G 73
chr-1.trna269-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-1.trna308-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-1.trna309-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-1.trna350-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-1.trna351-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-2.trna129-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-2.trna135-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-3.trna137-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-6.trna363-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-4.trna161-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-5.trna192-Arg-ACG   UCCCCAG-----CGGAGUC-G 73
chr-6.trna24-Arg-ACG    UCCCCAG-----CGGAGUC-G 73
chr-7.trna2-Arg-ACG     UCCCCAG-----CGGAGUC-G 73
chr-3.trna150-Arg-ACG   UCCCCAG-----CGAAGUC-G 73
chr-3.trna138-Arg-ACG   UCCCCG------CGGAGUC-G 72
chr-5.trna520-Arg-TCT   AUCCUAU-----UGGAUGA-A 72
chr-3.trna169-Arg-TCT   AUCCUAU-----UGGACGC-A 72
chr-1.trna479-Arg-TCT   AUCCUAU-----UGGGCGC-A 72
chr-1.trna51-Arg-TCT    AUCCUAU-----UGGACGC-A 72
chr-1.trna473-Arg-TCT   AUCCUAU-----UGGACGC-A 72
chr-4.trna370-Arg-TCT   AUUCUAU-----UGGACGC-A 72
chr-5.trna150-Arg-TCT   AUCCUAU-----UGGACGC-A 72
chr-1.trna524-Arg-TCT   AUCCUAU-----UGGACGC-A 72
chr-3.trna456-Arg-TCT   AUCCUAU-----UGGACCA-A 73
chr-3.trna537-Arg-ACG   AUCCCUC-----CUCGCCC-A 74
chr-3.trna91-Arg-ACG    AUCCCUC-----CUCGCCC-A 74
chr-3.trna213-Arg-ACG   AUCCCUC-----CUCGCCC-A 74
chr-5.trna180-Arg-ACG   AUCCCUC-----CUCGCCC-A 74
chr-2.trna114-Arg-ACG   AUCCCUC-----CUCGCCC-A 74
chr-3.trna40-Arg-GCG    ACCGGGUUGGGCCCUUGCAAA 79
                        .........70........80
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