```
                                 (((((((..((((........)))).(((((........)))))).....(((((.......
chr-4.trna51-Gln-TTG             GCGAGCGUGGCCAAGUGGU-AAGGCAGCGGGUUUUGGUCCCGUUACUCGGAGGUUCGAAU 59
chr-2.trna1-Gln-TTG              UGGGGCAUGGCCAAGUGGU-AAGGCAGCGGGUUUUGGUCCCGUUACUCGGAGGUUCGAAU 59
chr-1.trna88-Gln-TTG             UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-7.trna442-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-1.trna498-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-2.trna540-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-2.trna543-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-3.trna518-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-3.trna277-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-6.trna138-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-1.trna188-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUAUCGGCAUGCAAAGGUUCGAAU 59
chr-7.trna532-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUACCGGGUUGCAAAGGUUCGAAU 59
chr-6.trna382-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUACCGGCAUGCAAAGGUUCGAAU 59
chr-4.trna494-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUACCGGCAUGCAAAGGUUCGAAU 59
chr-1.trna3-Gln-TTG              UGGAGUAUAGCCAAGUGGU-AAGGCAUCGGUUUUUGGUACCGGCAUGCAAAGGUUCGAAU 59
chr-4.trna393-Gln-TTG            UGGAGUAUAGCCAAGUGGU-AAGGCAUUGGUUUUUGGUACCGGCAUGCAAAGGUUCGAAU 59
chr-3.trna93-Gln-TTG             UGGAGUAUAGCCAAGUGGU-AAGGCAUUGGUUUUUGGUACCGGCAUGCAAAGGUUCAAAU 59
chr-2.trna476-Gln-TTG            UGGAGUAUAUCCAAGUGGU-AAGGCAUCAGUUUUUGGUACCGGCAUGCAAAGGUUCGAAU 59
chr-2.trna251-Gln-TTG            UGGGGCGUGGCCAAGUGGU-AAGGCAGCGGGUUUUGGUCCCGUUACUCGGAGGUUCGAAU 59
chr-6.trna217-Gln-CTG            GGUCCUAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-7.trna353-Gln-CTG            GGUCCUAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-7.trna355-Gln-CTG            GGUCCUAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-7.trna354-Gln-CTG            GGUCCUAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-1.trna345-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-1.trna347-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-7.trna267-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-1.trna348-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-2.trna572-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-3.trna292-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-5.trna325-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-5.trna567-Gln-CTG            GGUCCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-3.trna73-Gln-CTG             GGUUCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-3.trna304-Gln-CTG            GGUUCCAUGGUCUAGUGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-4.trna509-Gln-CTG            GGUCCUAUGGUCUAGUGGUCAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-3.trna72-Gln-CTG             GGUUCUAUGGUCUAGCGGUUAGGACAUUGGACUCUGAAUCCAGUA-ACCCGAGGUUCAAGU 59
chr-3.trna165-Gln-TTG            GGUUUUGGAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna397-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna400-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-2.trna495-Gln-TTG            GGUUCUAUGGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-7.trna254-Gln-TTG            GGUUCUAUGGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna167-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCAAAU 59
chr-3.trna404-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCAAAU 59
chr-3.trna398-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna160-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna173-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna162-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna168-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna170-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna163-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna396-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGUG-ACCUGGGUUCGAAU 59
chr-3.trna401-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCA-ACCUGGGUUCGAAU 59
chr-3.trna406-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCA-ACCUGGGUUCAAAU 59
chr-3.trna164-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna166-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna402-Gln-TTG            GGUUUCAUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGCG-ACCUGGGUUCGAAU 59
chr-3.trna171-Gln-TTG            GGUUUCGUAGUGUAGUGGUUAGCACUCCAGACUUUGAAUCUGGUG-ACCUGGUUUCAAAU 59
chr-2.trna234-Gln-TTG            GG---UGUGGCCAAGUGGU-AAGGCAGCGGGUUUUGGUCCCUUUACUCGGAGGUUCGAAU 56
chr-7.trna278-Gln-TTG            -G---CGUAGCCAAGUGGU-AAGGCAGCGGGUUUUGGUCCCGUUACUCGGAGGUUCGAAU 55
                                 .........10........20........30........40........50.........
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                                 )))))..........)))))))).
chr-4.trna51-Gln-TTG             CCUUCCGUCCCAGA----UUGUU 78
chr-2.trna1-Gln-TTG              CCUUCCCUCCCAGAUUGUUUCAA 82
chr-1.trna88-Gln-TTG             CCUUU----------UACUCCAG 72
chr-7.trna442-Gln-TTG            CCUUU----------UACUCCAG 72
chr-1.trna498-Gln-TTG            CCUUU----------UACUCCAG 72
chr-2.trna540-Gln-TTG            CCUUU----------UACUCCAG 72
chr-2.trna543-Gln-TTG            CCUUU----------UACUCCAG 72
chr-3.trna518-Gln-TTG            CCUUU----------UACUCCAG 72
chr-3.trna277-Gln-TTG            CCUUU----------UACUCCAG 72
chr-6.trna138-Gln-TTG            CCUUU----------UACUCUAG 72
chr-1.trna188-Gln-TTG            CCUUG----------UACUCCAA 72
chr-7.trna532-Gln-TTG            CCUUU----------UACUCCAG 72
chr-6.trna382-Gln-TTG            CCUUU----------UACUCCAG 72
chr-4.trna494-Gln-TTG            CCUUU----------UACUCCAG 72
chr-1.trna3-Gln-TTG              CCUUU----------UACUCCAG 72
chr-4.trna393-Gln-TTG            CCUUU----------UACUCCAC 72
chr-3.trna93-Gln-TTG             CCUUU----------UACUCCAG 72
chr-2.trna476-Gln-TTG            CCUUU----------UACUCCAG 72
chr-2.trna251-Gln-TTG            CCUUC----------CAUCCCAG 72
chr-6.trna217-Gln-CTG            CUCGG----------UAGGACCU 72
chr-7.trna353-Gln-CTG            CUCGG----------UAGGACCU 72
chr-7.trna355-Gln-CTG            CUCGG----------UAGGACCU 72
chr-7.trna354-Gln-CTG            CUCGG----------UAGGACCU 72
chr-1.trna345-Gln-CTG            CUCGG----------UGGGACCU 72
chr-1.trna347-Gln-CTG            CUCGG----------UGGGACCU 72
chr-7.trna267-Gln-CTG            CUCGG----------UGGGACCU 72
chr-1.trna348-Gln-CTG            CUCGG----------UGGGACCU 72
chr-2.trna572-Gln-CTG            CUCGG----------UGGGACCU 72
chr-3.trna292-Gln-CTG            CUCGG----------UGGGACCU 72
chr-5.trna325-Gln-CTG            CUCGG----------UGGGACCU 72
chr-5.trna567-Gln-CTG            CUCGG----------UGGGACCU 72
chr-3.trna73-Gln-CTG             CUCGG----------UGGAACCU 72
chr-3.trna304-Gln-CTG            CUCGG----------UGGGACCU 72
chr-4.trna509-Gln-CTG            CUCGG----------UAGGACCU 72
chr-3.trna72-Gln-CTG             CUCGG----------UAGAACCU 72
chr-3.trna165-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna397-Gln-TTG            CCCUG----------CGAGACCU 72
chr-3.trna400-Gln-TTG            CCCUG----------CGAGACCU 72
chr-2.trna495-Gln-TTG            CCCGG----------UAGGACCU 72
chr-7.trna254-Gln-TTG            CCCGG----------UAGGACCU 72
chr-3.trna167-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna404-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna398-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna160-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna173-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna162-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna168-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna170-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna163-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna396-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna401-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna406-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna164-Gln-TTG            CCCGG----------GGAGACCU 72
chr-3.trna166-Gln-TTG            CCCAG----------CGAGACCU 72
chr-3.trna402-Gln-TTG            CCCGG----------CGAGACCU 72
chr-3.trna171-Gln-TTG            CCAGG----------CGAGACCU 72
chr-2.trna234-Gln-TTG            CCUUCCA--------UGGGUA-- 69
chr-7.trna278-Gln-TTG            CUUUCCA--------UCGAAACU 70
                                 .........70........80..
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