```
                                 ((((((((((((.(((((.....((....)))))))))))))).........((((......
chr-1.trna27-Val-TAC             GGUGCUGUGGGUGUAGUCGGUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAA 60
chr-10.trna51-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCGGUUCGAA 60
chr-1.trna4-Val-AAC              GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna17-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACCGAAGGUCUCCGGUUCGAG 60
chr-1.trna8-Val-AAC              GGUGCCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-1.trna9-Val-AAC              GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-1.trna63-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-2.trna35-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-2.trna55-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-3.trna19-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-4.trna43-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-4.trna44-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-4.trna62-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-10.trna16-Val-AAC            GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-4.trna67-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna18-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna19-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-7.trna48-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-7.trna47-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna20-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-7.trna42-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna33-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna45-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna41-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna43-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-5.trna71-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGGCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-3.trna20-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCUGGUUCGAG 60
chr-7.trna46-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna40-Val-AAC             GGUGUUGUGGGUGUAGUUGGUUAUCACAUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna42-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-3.trna21-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACAGAAGGUCUCCGGUUCGAG 60
chr-6.trna39-Val-AAC             GGUGUUGUGGGUGUAGUUGGUUAUCACAUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna38-Val-AAC             GGUGUCGUGGGUGUAGUUGGUUAUCACGCUAGUCUAACACAUUGAAGGUCUCCGGUUUGAG 60
chr-10.trna54-Val-AAC            AGUGUCGUGGGUGUAGUUGGUUAUCACGUCGGUCUAACACACUGAAGCUCUCCGGUCCGAG 60
chr-6.trna44-Val-AAC             GGUGUUGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACAAACUGAAGGUCUCCGGUUCGAG 60
chr-6.trna46-Val-AAC             GGUGUUGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACAAACUGAAGGUCUCCGGUUCGAG 60
chr-3.trna18-Val-AAC             AGUGGCGUGGGUGUAGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCGAG 60
chr-4.trna45-Val-AAC             GGCAUCGUGGGUGUUGUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGUUUCGAG 60
chr-1.trna5-Val-CAC              GUCUGGGUGGGUGUAGUUGGUCAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-8.trna61-Val-CAC             GUCUGGGUGGGUGUAGUUGGUCAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-11.trna19-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAG 60
chr-11.trna18-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAG 60
chr-11.trna17-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAG 60
chr-11.trna16-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-2.trna49-Val-CAC             GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-3.trna9-Val-CAC              GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-11.trna44-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-10.trna52-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-10.trna50-Val-CAC            GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-5.trna44-Val-CAC             GUCUGGGUGGGUGUAGUUGGUUAUCACGCUAGUCUCACACACUACAGGUCCCCGGUUCGAA 60
chr-6.trna29-Val-CAC             GUCUGGGUGGGUGUAGUCGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-8.trna18-Val-CAC             GUCUGGGUGGGUGUAGUCGGUUAUCACGCUAGUCUCACACACUAGAGGUCCCCGGUUCGAA 60
chr-5.trna39-Val-CAC             GUUUGGGUGGGUGUAGUCGGUUAUCACGCUAGUCUCACACACUAGAGGUUCCCGGUUCGAA 60
chr-3.trna8-Val-AAC              GGUGUUGUGGGUGUAAUUGGUUAUCACGUCAGUCUAACACACUGAAGGUCGCCGGUUCGAG 60
chr-1.trna13-Val-TAC             GGUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUUUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-1.trna14-Val-TAC             GGUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-7.trna60-Val-TAC             GAUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-5.trna68-Val-TAC             GAUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-4.trna1-Val-TAC              GAUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-4.trna34-Val-TAC             GAUGCUGUGGGUGUAGUG-GUUAUCACGUUAGUCUUACACACUAAAGGUCCCCAGUUCGAU 59
chr-3.trna6-Val-GAC              AGGGAUAUAACUCAGC--GGUAGAGUGUCACCUUGACGUGGUGGAAGUCAUCAGUUCAAG 58
                                 .........10........20........30........40........50.........
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                                 .)))))))))))).
chr-1.trna27-Val-TAC             CCUGGGCAGCACCA 74
chr-10.trna51-Val-CAC            CCCGGGCUCAGACA 74
chr-1.trna4-Val-AAC              UCCGGGCGACGCCA 74
chr-6.trna17-Val-AAC             UCUGGGCGACGCCA 74
chr-1.trna8-Val-AAC              UCCGGGCGGCGCCA 74
chr-1.trna9-Val-AAC              UCCGGGCGACGCCA 74
chr-1.trna63-Val-AAC             UCCGGGCGACGCCA 74
chr-2.trna35-Val-AAC             UCCGGGCGACGCCA 74
chr-2.trna55-Val-AAC             UCCGGGCGACGCCA 74
chr-3.trna19-Val-AAC             UCCGGGCGACGCCA 74
chr-4.trna43-Val-AAC             UCCGGGCGACGCCA 74
chr-4.trna44-Val-AAC             UCCGGGCGACGCCA 74
chr-4.trna62-Val-AAC             UCCGGGCGACGCCA 74
chr-10.trna16-Val-AAC            UCCGGGCGACGCCA 74
chr-4.trna67-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna18-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna19-Val-AAC             UCCGGGCGACGCCA 74
chr-7.trna48-Val-AAC             UCCGGGCGACGCCA 74
chr-7.trna47-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna20-Val-AAC             UCCGGGCGACGCCA 74
chr-7.trna42-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna33-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna45-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna41-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna43-Val-AAC             UCCGGGCGACGCCA 74
chr-5.trna71-Val-AAC             UCCGGGCGACGCCA 74
chr-3.trna20-Val-AAC             UCCGGGCGACGCCA 74
chr-7.trna46-Val-AAC             UCCGUGCGACGCCA 74
chr-6.trna40-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna42-Val-AAC             UCUAGGCGAUGCCA 74
chr-3.trna21-Val-AAC             UCCGGGCGACGCCA 74
chr-6.trna39-Val-AAC             UUCGGGCGACGCCA 74
chr-6.trna38-Val-AAC             UCCGGGCGACGCCA 74
chr-10.trna54-Val-AAC            UCCGGUCGACGCCA 74
chr-6.trna44-Val-AAC             UUCGGGCGACGCCA 74
chr-6.trna46-Val-AAC             UUCGGGCGACGCCA 74
chr-3.trna18-Val-AAC             UCCGGGCGACGCCA 74
chr-4.trna45-Val-AAC             UCCGGGCGACUCCA 74
chr-1.trna5-Val-CAC              CCCGGGCUCAGACA 74
chr-8.trna61-Val-CAC             CCCGGGCUCAGACA 74
chr-11.trna19-Val-CAC            CCCGGGCUCAGACA 74
chr-11.trna18-Val-CAC            CCCGGGCUCAGACA 74
chr-11.trna17-Val-CAC            CCCGGGCUCAGACA 74
chr-11.trna16-Val-CAC            CCCGGGCUCAGACA 74
chr-2.trna49-Val-CAC             CCCGGGCUCAGACA 74
chr-3.trna9-Val-CAC              CCCGGGCUCAGACA 74
chr-11.trna44-Val-CAC            CCCGGGCUCAGACA 74
chr-10.trna52-Val-CAC            CCCGGGCUCAGACA 74
chr-10.trna50-Val-CAC            CCCGGGCUCAGACA 74
chr-5.trna44-Val-CAC             CCCGGGCUCAGACA 74
chr-6.trna29-Val-CAC             CCCGGGCUCAGACA 74
chr-8.trna18-Val-CAC             CCCGGGCUCAGACA 74
chr-5.trna39-Val-CAC             CCCGGGCUCAGACA 74
chr-3.trna8-Val-AAC              UUUGGGCGAUGCCA 74
chr-1.trna13-Val-TAC             CCUGGGCAACAUCA 73
chr-1.trna14-Val-TAC             CCUGGGCAGCAUCA 73
chr-7.trna60-Val-TAC             CCUGGGCAGCAUCA 73
chr-5.trna68-Val-TAC             CCUGGGCAGCAUCA 73
chr-4.trna1-Val-TAC              CCUGGGCAGCAUCA 73
chr-4.trna34-Val-TAC             CCUGGGCAGCAUCA 73
chr-3.trna6-Val-GAC              CCUGAUUAUCCCUA 72
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