```
                                 (((((((((((.........)))))).(((((.......)))))).....(((((....
chr-Lu10.trna31-Val-CAC    GUAUAGGUGGUGUAAU--UGGUUAUUACGUUAGUCUCACAUACUAAAGAUCCCCAGUUCA 58
chr-Lu10.trna3-Val-AAC     GGUUUUGUGAUGUAGU--UGGUUAUCACGUCAGUCUAACACAUUGAAGGUCUCCGGUUCA 58
chr-Lu10.trna14-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu13.trna42-Val-AAC    GGUUUUGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu5.trna78-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu4.trna37-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu5.trna57-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu2.trna39-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu11.trna57-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCAUGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu1.trna68-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu1.trna96-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu10.trna15-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu10.trna34-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu13.trna45-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu13.trna46-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu5.trna80-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu15.trna18-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu15.trna43-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu5.trna1-Val-AAC      GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu2.trna43-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu4.trna69-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu6.trna39-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu3.trna73-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu4.trna22-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCG 58
chr-Lu11.trna58-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCUGGUUCG 58
chr-Lu5.trna81-Val-AAC     GGUUUUGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUUG 58
chr-Lu13.trna41-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu3.trna11-Val-AAC     GGUUUCGUGGUGUAGU--UAGUUAUCAAGUCAGUCUAACACACUGAAGGUCUUCGGUUCA 58
chr-Lu14.trna60-Val-AAC    GGUUUCGUGGUGUAGU--UGAUUAUCACGUCAGUCUAACACACUGAAGGUCUCCGGUUCA 58
chr-Lu11.trna62-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu12.trna44-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu9.trna74-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu13.trna39-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu6.trna2-Val-CAC      GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu6.trna37-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu9.trna47-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu12.trna53-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCG 58
chr-Lu15.trna31-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCGGUUCG 58
chr-Lu4.trna5-Val-CAC      GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCGGUUCG 58
chr-Lu1.trna101-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCA 58
chr-Lu7.trna19-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAGUUCA 58
chr-Lu4.trna47-Val-AAC     GGUUUCGUGGUGUAGU--UGGUUAUUACGUUAGUCUAACACACUGAAGGUCUCUGGUUGA 58
chr-Lu10.trna25-Val-CAC    GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAAUUUG 58
chr-Lu3.trna23-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCAUGUUAGUCUCACACACUAAAGGUCCCCAAUCCG 58
chr-Lu7.trna47-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGUUAGUCUCACACACUAAAGGUCCCCAAUUCG 58
chr-Lu4.trna73-Val-CAC     GUCUGGGUGGUGUAGU--UGGUUAUCACGCUAGUCUCACACACUAGUGGUCCCCGGUUCG 58
chr-Lu12.trna47-Val-AAC    GGUUUCGUGGUGUAGU--UGGUUAUCACGUUAGUCUAACACACUUGAAGGUCUCUGGUUUG 58
chr-Lu1.trna37-Val-AAC     GGUUUUGUGAUGUAGU--UGGUUAUCACAUCAGUCUAACACACUGAAGGUUUUCGGUUUG 58
chr-Lu9.trna39-Val-CAC     GUUUGGGUGGUAUAGU--UGGUUAUCACUUUAGUCUCACACACUAAAGAUUUUCGGUUCA 58
chr-Lu9.trna37-Val-TAC     GUCGCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu10.trna13-Val-TAC    GUCGCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu6.trna31-Val-TAC     GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu14.trna63-Val-TAC    GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu2.trna5-Val-TAC      GUUCCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu10.trna55-Val-TAC    GUUCUUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu11.trna49-Val-TAC    GUUCCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCAGUUCG 57
chr-Lu8.trna81-Val-TAC     GUUGCUAUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCGCCAGUUCG 57
chr-Lu6.trna45-Val-TAC     GUUGCUAUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCGCCAGUUCG 57
chr-Lu3.trna10-Val-TAC     GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCGGUUCG 57
chr-Lu14.trna42-Val-TAC    GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCGGUUCG 57
chr-Lu11.trna4-Val-TAC     GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCCGGUUCG 57
chr-Lu9.trna40-Val-TAC     GUUUCUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACACGCAAAAGGUCUCUGGUUCG 57
chr-Lu12.trna68-Val-CAC    GCCUGGAUGGUGUAGU--UGAUUAUCAUAUUAGUCUCACACACUAAAGAUCCCCAAUUUG 58
chr-Lu14.trna43-Val-TAC    GUUUAUGUGGUGUAG---UGGUUAUCACGUUUGCUUUACAUGCAAAGGUUUUUGGUUUG 57
chr-Lu2.trna42-Val-AAC     GGUUUCGUUGUGUAAU--UGGUUAUCACACGAGUCUAACACAUUGAAGGUCUCUGGUUGG 58
chr-Lu1.trna32-Val-TAC     AUUUUUGUGGUAGUAGUGAUUAUCACGUUUGUCUUACAUGUAAAAGAUUUUCGGUUCG 60
chr-Lu8.trna62-Val-CAC     GCGCAUCCGGUGUAGU----GGUAUCAUAUUACCCUCACACGGU-ACUGACCAGGGUUUG 55
chr-Lu13.trna38-Val-AAC    GGGGAUAUAGCUCAG---AUGGUAGAGCGUUCGCUUAACAUGCGAGAGGUACGGGGAAUG 57
chr-Lu13.trna67-Val-AAC    GGGGAUAUAGCUCAA---AUGGUAGAGUGCUCGCUUAACAUGUGAGAGGUAUGAGGAUCG 57
chr-Lu3.trna63-Val-GAC     AGGGAUAUAACUCAGC----GGUAGAGUGUCAACUUGACGUGGCGGAAGUCAUCAGUUCG 56
                           .........10........20........30........40........50.........
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                           ...)))))).)))))).
chr-Lu10.trna31-Val-CAC    AACUUAGGUUUAGACA 74
chr-Lu10.trna3-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu10.trna14-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu13.trna42-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu5.trna78-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu4.trna37-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu5.trna57-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu2.trna39-Val-AAC     AACCCGGGCGAAACCA 74
chr-Lu11.trna57-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu1.trna68-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu1.trna96-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu10.trna15-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu10.trna34-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu13.trna45-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu13.trna46-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu5.trna80-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu15.trna18-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu15.trna43-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu5.trna1-Val-AAC      AACCCGGGCGAAGCCA 74
chr-Lu2.trna43-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu4.trna69-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu6.trna39-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu3.trna73-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu4.trna22-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu11.trna58-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu5.trna81-Val-AAC     AACCCGGGCGAAGCCA 74
chr-Lu13.trna41-Val-AAC    AACCUGGGCGAAGCCA 74
chr-Lu3.trna11-Val-AAC     AACUCGGGCGAAACCA 74
chr-Lu14.trna60-Val-AAC    AACCCGGGCGAAGCCA 74
chr-Lu11.trna62-Val-CAC    AACCUGGGCUCAGACA 74
chr-Lu12.trna44-Val-CAC    AACCUGGGCUCAGACA 74
chr-Lu9.trna74-Val-CAC     AACCUGGGCUCAGACA 74
chr-Lu13.trna39-Val-CAC    AACCUGGGCUCAGACA 74
chr-Lu6.trna2-Val-CAC      AACCUGGGCUCAGACA 74
chr-Lu6.trna37-Val-CAC     AACCUGGGCUCAGACA 74
chr-Lu9.trna47-Val-CAC     AACCUGGGCUUAGACA 74
chr-Lu12.trna53-Val-CAC    AACCUGGGCUUAGACA 74
chr-Lu15.trna31-Val-CAC    AACCCGGGCUCAGACA 74
chr-Lu4.trna5-Val-CAC      AACCCGGGCUCAGACA 74
chr-Lu1.trna101-Val-CAC    AACCUGGGCUCAGACA 74
chr-Lu7.trna19-Val-CAC     AACCUGGGCUCAGACA 74
chr-Lu4.trna47-Val-AAC     AAUCCGGGCAAAGCCA 74
chr-Lu10.trna25-Val-CAC    AACCUGGGCUUAGACA 74
chr-Lu3.trna23-Val-CAC     AACCUGGGCUCAGACA 74
chr-Lu7.trna47-Val-CAC     AACCUGGGCUCAGACA 74
chr-Lu4.trna73-Val-CAC     AACCCGGGCUCAGACA 74
chr-Lu12.trna47-Val-AAC    AACUCGGCCGAAGUCA 74
chr-Lu1.trna37-Val-AAC     AAUUCGGAUGAAGCCA 74
chr-Lu9.trna39-Val-CAC     AAUUUGGAUUUAGACA 74
chr-Lu9.trna37-Val-TAC     AUCCUGGGCAGCGACA 73
chr-Lu10.trna13-Val-TAC    AUCCUGGGCAGCGACA 73
chr-Lu6.trna31-Val-TAC     AUCCUGGGCAGGAACA 73
chr-Lu14.trna63-Val-TAC    AUCCUGGGCAGGAACA 73
chr-Lu2.trna5-Val-TAC      AUCCUGGACAGGAACA 73
chr-Lu10.trna55-Val-TAC    AUCCUGGACAGGAACA 73
chr-Lu11.trna49-Val-TAC    AUCCUAGACAGGAACA 73
chr-Lu8.trna81-Val-TAC     AUCCUGGCUAGCAACA 73
chr-Lu6.trna45-Val-TAC     AUCCUGGCUAGCAACA 73
chr-Lu3.trna10-Val-TAC     AUCCCGGGCAGGAACA 73
chr-Lu14.trna42-Val-TAC    AUCCCGGGCAGGAACA 73
chr-Lu11.trna4-Val-TAC     AUCCCGGGCAGGAACA 73
chr-Lu9.trna40-Val-TAC     AUCCCGGGCAGGAACA 73
chr-Lu12.trna68-Val-CAC    AACCUGAGCUUAGACA 74
chr-Lu14.trna43-Val-TAC    AUCCCGAAUAGGAACA 73
chr-Lu2.trna42-Val-AAC     AAUUCGGGUGAAGCCA 74
chr-Lu1.trna32-Val-TAC     AUCCUGAUUAGAAACA 76
chr-Lu8.trna62-Val-CAC     AUUCCCCGGAUGCGCA 71
chr-Lu13.trna38-Val-AAC    AUACCCCGCAUCUCCA 73
chr-Lu13.trna67-Val-AAC    AUACCCCAUAUAUCCA 73
chr-Lu3.trna63-Val-GAC     AGCCUGAUUAUCCCUA 72
                           .........70.....
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