```
                                                  ((((....(((.........(((....))).....(((((.......)))))....(((((
chr-Lu2.trna72-Gly-TCC    AUCAACAUGUGUUUGUAU-UCAACGGUUAGGAUAAUUGCCUUCCAAACAAUAGACCUGGG 59
chr-Lu3.trna50-Gly-GCC    CUUAUUAUGAUUCGUUCUAAACAAUGGUAAAAUUUCUCUUUGCCAAGGAGAAGACGCGG 60
chr-Lu1.trna9-Gly-GCC     GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu1.trna10-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu9.trna79-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu1.trna51-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu1.trna111-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu9.trna42-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu9.trna36-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu10.trna22-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu8.trna82-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu11.trna10-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu11.trna35-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu11.trna60-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu8.trna36-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu11.trna70-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu8.trna14-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu7.trna52-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu6.trna58-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu6.trna46-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu11.trna73-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu6.trna35-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu13.trna83-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna3-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu5.trna67-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna13-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna27-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu5.trna47-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna34-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna50-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu14.trna64-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu4.trna15-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu15.trna23-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu15.trna53-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu3.trna21-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCGGG 51
chr-Lu8.trna17-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACAGUACAGACCCGGG 51
chr-Lu11.trna59-Gly-GCC   GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAGACCCUGG 51
chr-Lu11.trna1-Gly-GCC    GCAC----CAGU-GGU----CUAGUGGUAGAAUAGUACCCUGCCACGGUACAAACCCGGG 51
chr-Lu6.trna38-Gly-GCC    GCAC----CAGU-GGU----CUGGUGGUAGAAUAGGACCAUGCCAUGGUACAGACCCGGG 51
chr-Lu9.trna9-Gly-GCC     GCAC----CAGU-GGU----GUAGUGGUAGAAUAGUACCCUGCCACGAUACAGAUCUAGG 51
chr-Lu3.trna44-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu9.trna70-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu1.trna62-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu3.trna32-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu13.trna84-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu11.trna31-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu2.trna52-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu13.trna63-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu13.trna40-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu15.trna19-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu4.trna4-Gly-CCC     GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu12.trna21-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu14.trna15-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu6.trna19-Gly-CCC    GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu12.trna18-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu1.trna98-Gly-CCC    GUGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGG 51
chr-Lu14.trna18-Gly-GCC   GCAC----CAGU-GGU----UUAGUGGUAGAAUAGUAUCCUGCCACGGUACAGAAUCGGA 51
chr-Lu11.trna24-Gly-GCC   GCAC----CAGU-UGU----CUAUUGGUACGAUAGUACCCUGCCACAGUACAGACCGGG 51
chr-Lu15.trna10-Gly-ACC   GCAC----CAGU-GGUCUAGCUAGUGGUAGAACAGUACCCUACCACAAUACAAACUCGGG 55
chr-Lu13.trna64-Gly-CCC   GCGC----AUCU-GGU----GUAGUGGUAUCAUAGUACCCUCCCACGGUACUGACCAGGA 51
chr-Lu9.trna77-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna31-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna35-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna72-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna88-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu8.trna76-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu2.trna74-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu8.trna54-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu13.trna5-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu13.trna7-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu15.trna51-Gly-TCC   GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu4.trna6-Gly-TCC     GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu6.trna16-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu5.trna63-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu4.trna10-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu14.trna59-Gly-TCC   GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu14.trna55-Gly-TCC   GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu5.trna11-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu14.trna6-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu5.trna45-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu5.trna54-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna81-Gly-TCC    GCGU----UUGU-AGUC---UAACGAUUAGGAUAAUUGCCUUCCAAGCAAUAGACCCGGG 52
chr-Lu3.trna33-Gly-TCC    GCGU----CUGU-AGUA---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCCGGG 52
chr-Lu8.trna55-Gly-TCC    GCGU----UUGU-AGUC---CAACGGUUAGGAUAAUUUCCUUCCAAGCAAUAGACCGGG 52
chr-Lu5.trna34-Gly-TCC    GCGU----CUGU-AGUC---CAACGGUUAGGAUAAUUGCCUUCCAAGCAAUAGACCGGG 52
chr-Lu1.trna71-Gly-TCC    GCAU----UUGU-AGUC---CGAUGGUUAGGAUAAUUGCCUUCCAAGCAAUAGAUCCGGA 52
                          .........10........20........30........40........50.........
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                          .......))))))..)))))).
chr-Lu2.trna72-Gly-TCC    UUUGACUCCCGGC-A-CUGAUU 79
chr-Lu3.trna50-Gly-GCC    UUCGAUUCCCGCU-AUCCGAGA 81
chr-Lu1.trna9-Gly-GCC     UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu1.trna10-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu9.trna79-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu1.trna51-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu1.trna111-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu9.trna42-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu9.trna36-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu10.trna22-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu8.trna82-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna10-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna35-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna60-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu8.trna36-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna70-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu8.trna14-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu7.trna52-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu6.trna58-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu6.trna46-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna73-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu6.trna35-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu13.trna83-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna3-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu5.trna67-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna13-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna27-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu5.trna47-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna34-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna50-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu14.trna64-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu4.trna15-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu15.trna23-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu15.trna53-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu3.trna21-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu8.trna17-Gly-GCC    UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna59-Gly-GCC   UUCGAUUCCCGGC--UGGUGCA 71
chr-Lu11.trna1-Gly-GCC    UUUGAUUCCUGGC--UGGUGCA 71
chr-Lu6.trna38-Gly-GCC    UUUGAUUCCCUGC--UGGUGCA 71
chr-Lu9.trna9-Gly-GCC     UUUGGUUUCCGGC--UGGUGCA 71
chr-Lu3.trna44-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu9.trna70-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu1.trna62-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu3.trna32-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu13.trna84-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu11.trna31-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu2.trna52-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu13.trna63-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu13.trna40-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu15.trna19-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu4.trna4-Gly-CCC     UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu12.trna21-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu14.trna15-Gly-CCC   UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu6.trna19-Gly-CCC    UUCGAUUCCCUGG--AUGCGCA 71
chr-Lu12.trna18-Gly-CCC   UUCGAUUCCCUGG--AUACGCA 71
chr-Lu1.trna98-Gly-CCC    UUCGA-UUCCUGG--AUGCGUA 70
chr-Lu14.trna18-Gly-GCC   UUUGAUUCCUGAG--UGGUGCA 71
chr-Lu11.trna24-Gly-GCC   UUCGAUUCCCGGCUGUGGUGCA 73
chr-Lu15.trna10-Gly-ACC   UUCGAUUCUCGAC--UGGUGCA 75
chr-Lu13.trna64-Gly-CCC   UUCGA-UUCCUGU--AUGUACA 70
chr-Lu9.trna77-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu1.trna31-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu1.trna35-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu1.trna72-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu1.trna88-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu8.trna76-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu2.trna74-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu8.trna54-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu13.trna5-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu13.trna7-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu15.trna51-Gly-TCC   UUCGACUCCCGGC--AGACGCA 72
chr-Lu4.trna6-Gly-TCC     UUCGACUCCCGGC--AGACGCA 72
chr-Lu6.trna16-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu5.trna63-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu4.trna10-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu14.trna59-Gly-TCC   UUCGACUCCCGGC--AGACGCA 72
chr-Lu14.trna55-Gly-TCC   UUCGACUCCCGGC--AGACGCA 72
chr-Lu5.trna11-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu14.trna6-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu5.trna45-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu5.trna54-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu1.trna81-Gly-TCC    UUCGACUCCUGAC--AGACGCA 72
chr-Lu3.trna33-Gly-TCC    UUUGACUCCCGGC--AGACGCA 72
chr-Lu8.trna55-Gly-TCC    UUCGACUCCCGGC--AGACGCA 72
chr-Lu5.trna34-Gly-TCC    UUCGACUCCCAGC-AAGCCGCU 73
chr-Lu1.trna71-Gly-TCC    UUUGACACCUGGC--AAACGCA 72
                          .........70........80.
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