```
                          ((((((.((((........)))).(((((.......)))))).....(((.......
chr-3.trna372-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUACGGGGAUCGAUA 60
chr-4.trna282-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUACGGGGAUCGAUA 60
chr-5.trna351-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUACGGGGAUCGAUA 60
chr-7.trna368-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUACGGGGAUCGAUA 60
chr-5.trna187-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGCAUGGGGAUCGAUA 60
chr-2.trna460-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUACGAGGAUCGAUA 60
chr-2.trna498-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-1.trna113-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-3.trna406-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna457-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna455-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna454-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna453-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna452-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna450-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna448-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna462-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna439-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna427-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna426-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-5.trna207-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna424-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-5.trna324-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna422-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-6.trna25-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna240-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna20-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna18-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna11-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna10-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-6.trna26-Ala-AGC      GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna459-Ala-AGC     GGGGAUGUAACUCAGAUGGUAGAGUGCUUGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna460-Ala-AGC     GGGGAUGUAGCUCAGAUUUUAGAGCACUCGCUUAGCAUGCGAGAGGUAUGGGGAUCAAUA 60
chr-5.trna208-Ala-AGC     GGGUAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAUGUAUUGGGAUCGAUA 60
chr-7.trna425-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGGGCUUGCUUAGCAUGCGAGAGGUAUGGGGGUCGAUA 60
chr-7.trna461-Ala-AGC     GGGGAUGUAGCUCAGAUGCUAGAGCGCUCGCUUAGCAUGCGAGAGAUAUGGGGAUCGAUA 60
chr-3.trna373-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCACUUGCUUAGCAUGUGAGAGGUACGGGGAUCUGUA 60
chr-5.trna186-Ala-AGC     -GGGAUGUAGCUCAGAUGGUAGAGCACUCGCUUAGCAUGCGGGAGGCACGGGGAUAGAUA 59
chr-7.trna447-Ala-AGC     -GGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGAGGUAUGGGGAUCGAUA 59
chr-2.trna497-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAGCGCUCGCUUAGCAUGCGAGA---AUGGGGAUCGAUA 57
chr-2.trna22-Ala-AGC      GGGGAUGUAGCUCAAAUGUUAGAGUGCUCGCUUAGCAUGUGAGAGGUAUGGGGAUCGAUA 60
chr-7.trna423-Ala-AGC     GGGGAUGUAGCUCAGAUGGUAGAAAGCUCGCUUAGCAUGGGAGAGGUAUGGGGAUCGAUA 60
                          .........10........20........30........40........50.........

                          ))))))..)))))
chr-3.trna372-Ala-AGC     CCCCGCAUCUCCA 73
chr-4.trna282-Ala-AGC     CCCCGCAUUUCCA 73
chr-5.trna351-Ala-AGC     CCCCGCAUCUCCA 73
chr-7.trna368-Ala-AGC     CCCCGCAUCUCCA 73
chr-5.trna187-Ala-AGC     CCCCGCAUCUCCA 73
chr-2.trna460-Ala-AGC     CCCCGCAUCUCCA 73
chr-2.trna498-Ala-AGC     CCCCACUUCUCCA 73
chr-1.trna113-Ala-AGC     CCCCACUUCUCCA 73
chr-3.trna406-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna457-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna455-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna454-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna453-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna452-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna450-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna448-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna462-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna439-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna427-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna426-Ala-AGC     CCCCACUUCUCCA 73
chr-5.trna207-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna424-Ala-AGC     CCCCACUUCUCCA 73
chr-5.trna324-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna422-Ala-AGC     CCCCACUUCUCCA 73
chr-6.trna25-Ala-AGC      CCCCACUUCUCCA 73
chr-7.trna240-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna20-Ala-AGC      CCCCACUUCUCCA 73
chr-7.trna18-Ala-AGC      CCCCACUUCUCCA 73
chr-7.trna11-Ala-AGC      CCCCACUUCUCCA 73
chr-7.trna10-Ala-AGC      CCCCACUUCUCCA 73
chr-6.trna26-Ala-AGC      CCCCACUUCUCCA 73
chr-7.trna459-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna460-Ala-AGC     CCCCACUUCUCCA 73
chr-5.trna208-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna425-Ala-AGC     CCCCACUUCUCCA 73
chr-7.trna461-Ala-AGC     CCGCACUUCUCCA 73
chr-3.trna373-Ala-AGC     CCCCGCAUCUCCA 73
chr-5.trna186-Ala-AGC     CCCCGCAUCUCCA 72
chr-7.trna447-Ala-AGC     CCCCACUUCUCCA 72
chr-2.trna497-Ala-AGC     CCCCACUUCUCCA 70
chr-2.trna22-Ala-AGC      CCCCACUUCUACA 73
chr-7.trna423-Ala-AGC     CCCCACUCCUCCA 73
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