```
# Sequence name: Nsp1
#
%    Position    Residue    Register (Dimer,Trimer)    Probability    Dimer Prob    Trimer Prob    Probability by Heptad (a,b,c,d,e,f,g)
     1           M          f(e,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     2           N          g(f,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     3           F          a(g,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     4           N          b(a,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     5           T          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     6           P          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     7           Q          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     8           Q          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     9           N          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     10          K          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     11          T          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     12          P          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     13          F          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     14          S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     15          F          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     16          G          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     17          T          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     18          A          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     19          N          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     20          N          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     21          N          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     22          S          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     23          N          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     24          T          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     25          T          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     26          N          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     27          Q          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     28          N          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     29          S          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     30          S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     31          T          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     32          G          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     33          A          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     34          G          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     35          A          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     36          F          d(b,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     37          G          e(c,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     38          T          f(d,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     39          G          d(f,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     40          Q          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     41          S          f(b,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     42          T          g(c,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     43          F          a(d,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     44          G          b(e,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     45          F          c(f,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     46          N          a(f,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     47          N          b(g,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     48          S          c(a,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     49          A          d(b,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     50          P          e(c,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     51          N          f(b,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     52          N          g(c,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     53          T          a(d,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     54          N          b(e,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     55          N          c(f,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     56          A          d(g,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     57          N          e(a,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     58          S          f(b,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     59          S          g(c,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     60          I          a(d,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     61          T          b(e,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     62          P          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     63          A          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     64          F          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     65          G          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     66          S          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     67          N          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     68          N          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     69          T          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     70          G          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     71          N          e(a,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     72          T          f(b,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     73          A          g(c,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     74          F          a(d,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     75          G          b(e,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     76          N          c(f,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     77          S          d(g,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     78          N          e(a,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     79          P          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     80          T          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     81          S          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     82          N          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     83          V          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     84          F          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     85          G          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     86          S          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     87          N          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     88          N          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     89          S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     90          T          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     91          T          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     92          N          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     93          T          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     94          F          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     95          G          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     96          S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     97          N          a(f,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     98          S          b(g,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     99          A          c(a,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     100         G          d(b,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     101         T          e(c,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     102         S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     103         L          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     104         F          e(d,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     105         G          f(g,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     106         S          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     107         S          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     108         S          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     109         A          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     110         Q          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     111         Q          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     112         T          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     113         K          a(a,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     114         S          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     115         N          c(c,c)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     116         G          d(d,d)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     117         T          e(e,e)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     118         A          f(f,f)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     119         G          g(g,g)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     120         G          a(f,a)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
     121         N          b(b,b)                     0.0            0.0           0.0            a:0.0  b:0.0  c:0.0  d:0.0  e:0.0  f:0.0  g:0.0
```

122	T	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
123	F	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
124	G	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
125	S	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
126	S	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
127	S	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
128	L	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
129	F	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
130	N	b(b,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
131	N	g(e,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
132	S	a(f,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
133	T	b(g,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
134	N	c(a,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
135	S	d(b,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
136	N	e(c,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
137	T	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
138	T	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
139	K	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
140	P	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
141	A	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
142	F	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
143	G	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
144	G	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
145	L	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
146	N	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
147	F	f(c,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
148	G	d(e,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
149	G	e(f,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
150	G	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
151	N	a(f,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
152	N	b(g,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
153	T	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
154	T	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
155	P	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
156	S	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
157	S	e(g,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
158	T	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
159	G	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
160	N	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
161	A	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
162	N	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
163	T	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
164	S	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
165	N	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
166	N	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
167	L	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
168	F	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
169	G	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
170	A	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
171	T	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
172	A	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
173	N	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
174	A	a(d,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
175	N	e(e,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
176	K	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
177	P	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
178	A	g(d,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
179	F	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
180	S	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
181	F	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
182	G	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
183	A	e(b,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
184	T	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
185	T	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
186	N	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
187	D	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
188	D	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
189	K	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
190	K	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
191	T	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
192	E	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
193	P	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
194	D	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
195	K	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
196	P	c(b,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
197	A	a(e,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
198	F	b(f,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
199	S	c(g,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
200	F	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
201	N	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
202	S	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
203	S	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
204	V	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
205	G	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
206	N	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
207	K	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
208	T	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
209	D	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
210	A	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
211	Q	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
212	A	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
213	P	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
214	T	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
215	T	g(e,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
216	G	a(f,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
217	F	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
218	S	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
219	F	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
220	G	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
221	S	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
222	Q	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
223	L	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
224	G	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
225	G	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
226	N	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
227	K	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
228	T	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
229	V	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
230	N	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
231	E	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
232	A	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
233	A	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
234	K	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
235	P	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
236	S	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
237	L	a(a,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
238	S	b(b,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
239	F	c(c,c)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
240	G	d(d,d)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
241	S	e(e,e)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
242	G	f(f,f)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
243	S	g(g,g)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
244	A	a(d,a)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0
245	G	b(e,b)	0.0	0.0	0.0	a:0.0	b:0.0	c:0.0	d:0.0	e:0.0	f:0.0	g:0.0

246	A	c(f,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
247	N	e(g,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
248	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
249	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
250	G	e(f,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
251	A	f(g,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
252	S	g(f,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
253	Q	g(b,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
254	P	a(c,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
255	E	b(d,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
256	P	c(e,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
257	T	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
258	T	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
259	N	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
260	E	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
261	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
262	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
263	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
264	P	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
265	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
266	L	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
267	S	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
268	F	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
269	G	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
270	T	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
271	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
272	T	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
273	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
274	D	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
275	N	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
276	K	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
277	T	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
278	T	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
279	N	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
280	T	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
281	T	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
282	P	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
283	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
284	F	b(c,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
285	S	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
286	F	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
287	G	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
288	A	d(b,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
289	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
290	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
291	D	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
292	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
293	N	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
294	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
295	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
296	G	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
297	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
298	T	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
299	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
300	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
301	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
302	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
303	F	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
304	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
305	F	d(f,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
306	G	e(g,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
307	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
308	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
309	P	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
310	E	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
311	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
312	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
313	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
314	D	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
315	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
316	N	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
317	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
318	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
319	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
320	P	a(a,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
321	A	b(b,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
322	F	a(c,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
323	S	b(d,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
324	F	c(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
325	G	a(f,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
326	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
327	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
328	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
329	N	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
330	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
331	D	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
332	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
333	Q	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
334	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
335	G	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
336	T	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
337	A	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
338	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
339	P	c(a,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
340	A	d(b,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
341	F	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
342	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
343	F	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
344	G	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
345	A	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
346	K	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
347	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
348	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
349	E	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
350	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
351	N	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
352	N	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
353	N	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
354	E	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
355	T	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
356	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
357	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
358	P	g(a,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
359	A	a(b,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
360	F	b(c,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
361	S	c(d,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
362	F	d(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
363	G	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
364	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
365	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
366	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
367	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
368	E	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
369	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0

370	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
371	D	g(c,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
372	G	a(d,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
373	D	b(e,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
374	A	c(f,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
375	S	d(g,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
376	K	e(a,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
377	P	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
378	A	g(c,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
379	F	a(d,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
380	S	b(e,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
381	F	d(f,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
382	G	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
383	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
384	K	e(c,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
385	P	f(d,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
386	D	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
387	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
388	N	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
389	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
390	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
391	S	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
392	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
393	T	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
394	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
395	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
396	P	c(a,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
397	A	d(b,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
398	F	e(c,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
399	S	c(e,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
400	F	d(f,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
401	G	e(g,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
402	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
403	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
404	P	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
405	E	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
406	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
407	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
408	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
409	D	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
410	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
411	N	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
412	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
413	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
414	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
415	P	a(a,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
416	A	b(b,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
417	F	a(c,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
418	S	b(d,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
419	F	c(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
420	G	a(f,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
421	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
422	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
423	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
424	N	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
425	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
426	D	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
427	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
428	Q	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
429	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
430	G	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
431	T	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
432	A	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
433	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
434	P	c(a,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
435	A	d(b,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
436	F	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
437	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
438	F	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
439	G	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
440	A	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
441	K	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
442	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
443	A	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
444	E	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
445	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
446	N	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
447	N	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
448	N	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
449	E	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
450	T	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
451	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
452	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
453	P	g(a,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
454	A	a(b,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
455	F	b(c,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
456	S	c(d,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
457	F	d(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
458	G	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
459	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
460	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
461	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
462	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
463	E	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
464	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
465	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
466	D	g(c,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
467	G	a(d,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
468	D	b(e,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
469	A	c(f,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
470	S	d(g,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
471	K	e(a,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
472	P	f(a,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
473	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
474	F	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
475	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
476	F	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
477	G	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
478	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
479	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
480	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
481	D	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
482	E	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
483	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
484	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
485	D	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
486	S	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
487	D	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
488	S	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
489	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
490	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
491	P	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
492	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
493	F	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0

494	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
495	F	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
496	G	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
497	T	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
498	K	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
499	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
500	N	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
501	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
502	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
503	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
504	D	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
505	S	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
506	G	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
507	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
508	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
509	K	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
510	P	f(b,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
511	A	g(c,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
512	F	d(d,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
513	S	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
514	F	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
515	G	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
516	A	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
517	K	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
518	P	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
519	D	d(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
520	E	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
521	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
522	K	g(a,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
523	N	a(b,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
524	D	b(c,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
525	E	c(d,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
526	V	d(e,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
527	S	e(f,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
528	K	f(g,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
529	P	a(a,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
530	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
531	F	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
532	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
533	F	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
534	G	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
535	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
536	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
537	A	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
538	N	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
539	E	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
540	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
541	K	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
542	E	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
543	S	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
544	D	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
545	E	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
546	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
547	K	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
548	S	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
549	A	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
550	F	a(c,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
551	S	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
552	F	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
553	G	d(f,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
554	S	e(g,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
555	K	f(a,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
556	P	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
557	T	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
558	G	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
559	K	e(c,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
560	E	f(d,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
561	E	g(e,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
562	G	a(f,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
563	D	b(g,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
564	G	c(a,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
565	A	d(b,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
566	K	c(c,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
567	A	d(d,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
568	A	e(e,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
569	I	f(f,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
570	S	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
571	F	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
572	G	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
573	A	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
574	K	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
575	P	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
576	E	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
577	E	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
578	Q	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
579	K	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
580	S	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
581	S	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
582	D	e(e,e)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
583	T	f(f,f)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
584	S	g(g,g)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
585	K	a(a,a)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
586	P	b(b,b)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
587	A	c(c,c)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
588	F	d(d,d)	0.0	0.0	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
589	T	e(e,e)	0.001	0.001	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.001 f:0.0 g:0.0
590	F	f(f,f)	0.001	0.001	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.001 g:0.0
591	G	g(g,g)	0.002	0.002	0.0	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.002
592	A	a(a,a)	0.009	0.009	0.0	a:0.009 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
593	Q	b(b,b)	0.019	0.018	0.0	a:0.0 b:0.019 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
594	K	c(c,c)	0.022	0.021	0.0	a:0.0 b:0.0 c:0.022 d:0.0 e:0.0 f:0.0 g:0.0
595	D	d(d,d)	0.024	0.023	0.0	a:0.0 b:0.0 c:0.0 d:0.024 e:0.0 f:0.0 g:0.0
596	N	e(e,e)	0.038	0.037	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.038 f:0.0 g:0.0
597	E	f(f,f)	0.047	0.045	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.047 g:0.0
598	K	g(g,g)	0.05	0.048	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.05
599	K	a(a,a)	0.051	0.05	0.001	a:0.051 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
600	T	b(b,b)	0.052	0.05	0.001	a:0.0 b:0.052 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
601	E	c(c,c)	0.052	0.05	0.001	a:0.0 b:0.0 c:0.052 d:0.0 e:0.0 f:0.0 g:0.0
602	E	d(d,d)	0.052	0.05	0.001	a:0.0 b:0.0 c:0.0 d:0.052 e:0.0 f:0.0 g:0.0
603	S	e(e,e)	0.052	0.05	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.052 f:0.0 g:0.0
604	S	f(f,f)	0.052	0.05	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.052 g:0.0
605	T	g(g,g)	0.052	0.051	0.001	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.052
606	G	a(a,a)	0.053	0.051	0.001	a:0.053 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
607	K	b(b,b)	0.053	0.051	0.002	a:0.0 b:0.053 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
608	S	c(c,c)	0.053	0.051	0.002	a:0.0 b:0.0 c:0.053 d:0.0 e:0.0 f:0.0 g:0.0
609	T	d(d,d)	0.054	0.051	0.002	a:0.0 b:0.0 c:0.0 d:0.054 e:0.0 f:0.0 g:0.0
610	A	e(e,e)	0.054	0.052	0.002	a:0.0 b:0.0 c:0.0 d:0.0 e:0.054 f:0.0 g:0.0
611	D	f(f,f)	0.054	0.052	0.002	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.054 g:0.0
612	V	g(g,g)	0.054	0.052	0.002	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.054
613	K	a(a,a)	0.055	0.052	0.002	a:0.055 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
614	S	b(b,b)	0.055	0.052	0.002	a:0.0 b:0.055 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
615	S	c(c,c)	0.055	0.052	0.002	a:0.0 b:0.0 c:0.055 d:0.0 e:0.0 f:0.0 g:0.0
616	D	d(d,d)	0.055	0.053	0.002	a:0.0 b:0.0 c:0.0 d:0.055 e:0.0 f:0.0 g:0.0
617	S	e(e,e)	0.056	0.053	0.003	a:0.0 b:0.0 c:0.0 d:0.0 e:0.056 f:0.0 g:0.0

618	L	f(f,f)	0.057	0.053	0.003	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.057 g:0.0
619	K	g(g,g)	0.058	0.054	0.003	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.058
620	L	a(a,a)	0.059	0.055	0.004	a:0.059 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
621	N	b(b,b)	0.059	0.055	0.004	a:0.0 b:0.059 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
622	S	c(c,c)	0.059	0.055	0.004	a:0.0 b:0.0 c:0.059 d:0.0 e:0.0 f:0.0 g:0.0
623	K	d(d,d)	0.06	0.055	0.004	a:0.0 b:0.0 c:0.0 d:0.06 e:0.0 f:0.0 g:0.0
624	P	e(e,e)	0.06	0.056	0.004	a:0.0 b:0.0 c:0.0 d:0.0 e:0.06 f:0.0 g:0.0
625	V	f(f,f)	0.162	0.141	0.02	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.162 g:0.0
626	E	g(g,g)	0.341	0.293	0.047	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.341
627	L	a(a,a)	0.384	0.326	0.058	a:0.384 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
628	K	b(b,b)	0.401	0.339	0.062	a:0.0 b:0.401 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
629	P	c(c,c)	0.409	0.345	0.064	a:0.0 b:0.0 c:0.409 d:0.0 e:0.0 f:0.0 g:0.0
630	V	d(d,d)	0.482	0.399	0.082	a:0.0 b:0.0 c:0.0 d:0.482 e:0.0 f:0.0 g:0.0
631	S	e(e,e)	0.564	0.467	0.096	a:0.0 b:0.0 c:0.0 d:0.0 e:0.564 f:0.0 g:0.0
632	L	f(f,f)	0.633	0.522	0.11	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.633 g:0.0
633	D	g(g,g)	0.761	0.631	0.129	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.761
634	N	a(a,a)	0.849	0.704	0.144	a:0.849 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
635	K	b(b,b)	0.888	0.732	0.156	a:0.0 b:0.888 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
636	T	c(c,c)	0.913	0.747	0.165	a:0.0 b:0.0 c:0.913 d:0.0 e:0.0 f:0.0 g:0.0
637	L	d(d,d)	0.941	0.766	0.175	a:0.0 b:0.0 c:0.0 d:0.941 e:0.0 f:0.0 g:0.0
638	D	e(e,e)	0.946	0.768	0.177	a:0.0 b:0.0 c:0.0 d:0.0 e:0.946 f:0.0 g:0.0
639	D	f(f,f)	0.954	0.774	0.18	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.954 g:0.0
640	L	g(g,g)	0.962	0.778	0.184	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.962
641	V	a(a,a)	0.972	0.783	0.188	a:0.972 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
642	T	b(b,b)	0.979	0.788	0.19	a:0.0 b:0.979 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
643	K	c(c,c)	0.988	0.794	0.193	a:0.0 b:0.0 c:0.988 d:0.0 e:0.0 f:0.0 g:0.0
644	W	d(d,d)	0.992	0.796	0.195	a:0.0 b:0.0 c:0.0 d:0.992 e:0.0 f:0.0 g:0.0
645	T	e(e,e)	0.995	0.797	0.197	a:0.0 b:0.0 c:0.0 d:0.0 e:0.995 f:0.0 g:0.0
646	N	f(f,f)	0.997	0.798	0.198	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.997 g:0.0
647	Q	g(g,g)	0.998	0.799	0.199	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.998
648	L	a(a,a)	0.998	0.799	0.199	a:0.998 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
649	T	b(b,b)	0.999	0.799	0.199	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
650	E	c(c,c)	0.999	0.799	0.199	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
651	S	d(d,d)	0.999	0.799	0.199	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
652	A	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
653	S	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
654	H	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
655	F	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
656	E	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
657	Q	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
658	Y	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
659	T	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
660	K	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
661	K	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
662	I	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
663	N	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
664	S	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
665	W	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
666	D	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
667	Q	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
668	V	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
669	L	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
670	V	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
671	K	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
672	G	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
673	G	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
674	E	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
675	Q	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
676	I	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
677	S	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
678	Q	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
679	L	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
680	Y	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
681	S	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
682	D	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
683	A	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
684	V	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
685	M	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
686	A	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
687	E	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
688	H	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
689	S	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
690	Q	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
691	N	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
692	K	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
693	I	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
694	D	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
695	Q	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
696	S	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
697	L	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
698	Q	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
699	Y	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
700	I	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
701	E	e(e,e)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.999 f:0.0 g:0.0
702	R	f(f,f)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.999 g:0.0
703	Q	g(g,g)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.999
704	Q	a(a,a)	0.999	0.799	0.2	a:0.999 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
705	D	b(b,b)	0.999	0.799	0.2	a:0.0 b:0.999 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
706	E	c(c,c)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.999 d:0.0 e:0.0 f:0.0 g:0.0
707	L	d(d,d)	0.999	0.799	0.2	a:0.0 b:0.0 c:0.0 d:0.999 e:0.0 f:0.0 g:0.0
708	E	e(e,e)	0.998	0.798	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.998 f:0.0 g:0.0
709	N	f(f,f)	0.995	0.795	0.2	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.995 g:0.0
710	F	g(g,g)	0.989	0.79	0.199	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.989
711	L	a(a,a)	0.989	0.789	0.199	a:0.989 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
712	D	b(b,b)	0.989	0.789	0.199	a:0.0 b:0.989 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
713	N	c(c,c)	0.988	0.788	0.199	a:0.0 b:0.0 c:0.988 d:0.0 e:0.0 f:0.0 g:0.0
714	F	d(d,d)	0.987	0.788	0.199	a:0.0 b:0.0 c:0.0 d:0.987 e:0.0 f:0.0 g:0.0
715	E	e(e,e)	0.986	0.787	0.198	a:0.0 b:0.0 c:0.0 d:0.0 e:0.986 f:0.0 g:0.0
716	T	f(f,f)	0.983	0.784	0.198	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.983 g:0.0
717	K	g(g,g)	0.979	0.781	0.197	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.979
718	T	a(a,a)	0.971	0.774	0.196	a:0.971 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
719	E	b(b,b)	0.968	0.772	0.195	a:0.0 b:0.968 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
720	A	c(c,c)	0.958	0.764	0.194	a:0.0 b:0.0 c:0.958 d:0.0 e:0.0 f:0.0 g:0.0
721	L	d(d,d)	0.944	0.751	0.192	a:0.0 b:0.0 c:0.0 d:0.944 e:0.0 f:0.0 g:0.0
722	L	e(e,e)	0.87	0.685	0.185	a:0.0 b:0.0 c:0.0 d:0.0 e:0.87 f:0.0 g:0.0
723	S	f(f,f)	0.829	0.65	0.179	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.829 g:0.0
724	D	g(g,g)	0.75	0.579	0.171	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.75
725	V	a(a,a)	0.643	0.482	0.16	a:0.642 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
726	V	b(b,b)	0.497	0.357	0.139	a:0.0 b:0.494 c:0.0 d:0.0 e:0.0 f:0.0 g:0.002
727	S	c(c,c)	0.447	0.318	0.129	a:0.004 b:0.0 c:0.442 d:0.0 e:0.0 f:0.0 g:0.0
728	T	d(d,d)	0.376	0.259	0.117	a:0.0 b:0.011 c:0.0 d:0.365 e:0.0 f:0.0 g:0.0
729	S	e(e,e)	0.323	0.214	0.109	a:0.0 b:0.0 c:0.019 d:0.0 e:0.304 f:0.0 g:0.0
730	S	f(f,f)	0.279	0.177	0.101	a:0.0 b:0.0 c:0.0 d:0.025 e:0.0 f:0.253 g:0.0
731	G	g(g,g)	0.236	0.139	0.097	a:0.0 b:0.0 c:0.0 d:0.0 e:0.037 f:0.0 g:0.199
732	A	a(a,a)	0.253	0.141	0.112	a:0.193 b:0.0 c:0.0 d:0.0 e:0.0 f:0.06 g:0.0
733	A	b(b,g)	0.265	0.142	0.122	a:0.0 b:0.186 c:0.0 d:0.0 e:0.0 f:0.0 g:0.078
734	A	c(c,a)	0.276	0.144	0.132	a:0.099 b:0.0 c:0.176 d:0.0 e:0.0 f:0.0 g:0.0
735	N	d(d,b)	0.289	0.148	0.141	a:0.0 b:0.12 c:0.0 d:0.169 e:0.0 f:0.0 g:0.0
736	N	e(e,c)	0.302	0.152	0.149	a:0.0 b:0.0 c:0.136 d:0.0 e:0.166 f:0.0 g:0.0
737	N	f(f,d)	0.31	0.154	0.155	a:0.0 b:0.0 c:0.0 d:0.147 e:0.0 f:0.162 g:0.0
738	D	e(g,e)	0.34	0.166	0.174	a:0.0 b:0.0 c:0.0 d:0.0 e:0.183 f:0.0 g:0.157
739	Q	f(a,f)	0.383	0.184	0.199	a:0.149 b:0.0 c:0.0 d:0.0 e:0.0 f:0.234 g:0.0
740	K	g(b,g)	0.415	0.195	0.219	a:0.0 b:0.146 c:0.0 d:0.0 e:0.0 f:0.0 g:0.268
741	R	a(c,a)	0.425	0.197	0.228	a:0.284 b:0.0 c:0.14 d:0.0 e:0.0 f:0.0 g:0.0

742	Q	b(d,b)	0.431	0.192	0.238	a:0.0 b:0.3 c:0.0 d:0.131 e:0.0 f:0.0 g:0.0
743	Q	c(e,c)	0.435	0.19	0.244	a:0.0 b:0.0 c:0.308 d:0.0 e:0.126 f:0.0 g:0.0
744	A	d(f,d)	0.426	0.181	0.244	a:0.0 b:0.0 c:0.0 d:0.313 e:0.0 f:0.112 g:0.0
745	Y	e(e,e)	0.407	0.166	0.24	a:0.0 b:0.0 c:0.0 d:0.0 e:0.316 f:0.0 g:0.09
746	K	f(f,f)	0.412	0.164	0.247	a:0.086 b:0.0 c:0.0 d:0.0 e:0.0 f:0.325 g:0.0
747	T	g(g,g)	0.403	0.152	0.25	a:0.0 b:0.072 c:0.0 d:0.0 e:0.0 f:0.0 g:0.33
748	A	a(a,a)	0.394	0.14	0.253	a:0.336 b:0.0 c:0.057 d:0.0 e:0.0 f:0.0 g:0.0
749	Q	b(b,b)	0.386	0.129	0.257	a:0.0 b:0.342 c:0.0 d:0.044 e:0.0 f:0.0 g:0.0
750	T	c(c,c)	0.38	0.121	0.259	a:0.0 b:0.0 c:0.345 d:0.0 e:0.035 f:0.0 g:0.0
751	L	d(d,d)	0.37	0.109	0.261	a:0.0 b:0.0 c:0.0 d:0.349 e:0.0 f:0.021 g:0.0
752	D	e(e,e)	0.366	0.105	0.261	a:0.0 b:0.0 c:0.0 d:0.0 e:0.35 f:0.0 g:0.016
753	E	f(f,f)	0.36	0.099	0.261	a:0.009 b:0.0 c:0.0 d:0.0 e:0.0 f:0.351 g:0.0
754	N	g(g,g)	0.358	0.096	0.261	a:0.0 b:0.006 c:0.0 d:0.0 e:0.0 f:0.0 g:0.351
755	L	a(a,a)	0.354	0.092	0.261	a:0.352 b:0.0 c:0.002 d:0.0 e:0.0 f:0.0 g:0.0
756	N	b(b,b)	0.353	0.091	0.261	a:0.0 b:0.352 c:0.0 d:0.001 e:0.0 f:0.0 g:0.0
757	S	c(c,c)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.352 d:0.0 e:0.0 f:0.0 g:0.0
758	L	d(d,d)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.353 e:0.0 f:0.0 g:0.0
759	S	e(e,e)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.353 f:0.0 g:0.0
760	S	f(f,f)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.353 g:0.0
761	N	g(g,g)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.353
762	L	a(a,a)	0.353	0.091	0.262	a:0.353 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
763	S	b(b,b)	0.353	0.091	0.262	a:0.0 b:0.353 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
764	S	c(c,c)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.353 d:0.0 e:0.0 f:0.0 g:0.0
765	L	d(d,d)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.353 e:0.0 f:0.0 g:0.0
766	I	e(e,e)	0.353	0.091	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.353 f:0.0 g:0.0
767	V	f(f,f)	0.353	0.09	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.353 g:0.0
768	E	g(g,g)	0.353	0.09	0.262	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.353
769	I	a(a,a)	0.353	0.09	0.262	a:0.353 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
770	N	b(b,b)	0.353	0.09	0.262	a:0.0 b:0.353 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
771	N	c(c,c)	0.352	0.09	0.262	a:0.0 b:0.0 c:0.352 d:0.0 e:0.0 f:0.0 g:0.0
772	V	d(d,d)	0.352	0.09	0.262	a:0.0 b:0.0 c:0.0 d:0.352 e:0.0 f:0.0 g:0.0
773	S	e(e,e)	0.352	0.09	0.261	a:0.0 b:0.0 c:0.0 d:0.0 e:0.352 f:0.0 g:0.0
774	N	f(f,f)	0.352	0.09	0.261	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.352 g:0.0
775	T	g(g,g)	0.352	0.09	0.261	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.352
776	F	a(a,a)	0.351	0.09	0.261	a:0.351 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
777	N	b(b,b)	0.351	0.09	0.261	a:0.0 b:0.351 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
778	K	c(c,c)	0.351	0.09	0.261	a:0.0 b:0.0 c:0.351 d:0.0 e:0.0 f:0.0 g:0.0
779	T	d(d,d)	0.351	0.09	0.261	a:0.0 b:0.0 c:0.0 d:0.351 e:0.0 f:0.0 g:0.0
780	T	e(e,e)	0.351	0.09	0.261	a:0.0 b:0.0 c:0.0 d:0.0 e:0.351 f:0.0 g:0.0
781	N	f(f,f)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.351 g:0.0
782	I	g(g,g)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.35
783	D	a(a,a)	0.35	0.09	0.26	a:0.35 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
784	I	b(b,b)	0.35	0.09	0.26	a:0.0 b:0.35 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
785	N	c(c,c)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.35 d:0.0 e:0.0 f:0.0 g:0.0
786	N	d(d,d)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.35 e:0.0 f:0.0 g:0.0
787	E	e(e,e)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.35 f:0.0 g:0.0
788	D	f(f,f)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.351 g:0.0
789	E	g(g,g)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.351
790	N	a(a,a)	0.351	0.09	0.26	a:0.351 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
791	I	b(b,b)	0.351	0.09	0.26	a:0.0 b:0.351 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
792	Q	c(c,c)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.351 d:0.0 e:0.0 f:0.0 g:0.0
793	L	d(d,d)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.351 e:0.0 f:0.0 g:0.0
794	I	e(e,e)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.351 f:0.0 g:0.0
795	K	f(f,f)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.351 g:0.0
796	I	g(g,g)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.351
797	L	a(a,a)	0.351	0.09	0.26	a:0.351 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
798	N	b(b,b)	0.351	0.09	0.26	a:0.0 b:0.351 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
799	S	c(c,c)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.351 d:0.0 e:0.0 f:0.0 g:0.0
800	H	d(d,d)	0.351	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.35 e:0.0 f:0.0 g:0.0
801	F	e(e,e)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.35 f:0.0 g:0.0
802	D	f(f,f)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.35 g:0.0
803	A	g(g,g)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.35
804	L	a(a,a)	0.35	0.09	0.26	a:0.35 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
805	R	b(b,b)	0.35	0.09	0.26	a:0.0 b:0.35 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
806	S	c(c,c)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.35 d:0.0 e:0.0 f:0.0 g:0.0
807	L	d(d,d)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.35 e:0.0 f:0.0 g:0.0
808	D	e(e,e)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.35 f:0.0 g:0.0
809	D	f(f,f)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.35 g:0.0
810	N	g(g,g)	0.35	0.09	0.26	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.35
811	S	a(a,a)	0.35	0.09	0.26	a:0.35 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
812	T	b(b,b)	0.35	0.089	0.26	a:0.0 b:0.35 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
813	S	c(c,c)	0.35	0.089	0.26	a:0.0 b:0.0 c:0.35 d:0.0 e:0.0 f:0.0 g:0.0
814	L	d(d,d)	0.35	0.089	0.26	a:0.0 b:0.0 c:0.0 d:0.35 e:0.0 f:0.0 g:0.0
815	E	e(e,e)	0.349	0.089	0.259	a:0.0 b:0.0 c:0.0 d:0.0 e:0.349 f:0.0 g:0.0
816	K	f(f,f)	0.347	0.089	0.258	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.347 g:0.0
817	Q	g(g,g)	0.344	0.088	0.255	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.344
818	I	a(a,a)	0.334	0.084	0.249	a:0.334 b:0.0 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
819	N	b(b,b)	0.313	0.079	0.233	a:0.0 b:0.313 c:0.0 d:0.0 e:0.0 f:0.0 g:0.0
820	S	c(c,c)	0.286	0.072	0.213	a:0.0 b:0.0 c:0.286 d:0.0 e:0.0 f:0.0 g:0.0
821	I	d(d,d)	0.237	0.056	0.18	a:0.0 b:0.0 c:0.0 d:0.237 e:0.0 f:0.0 g:0.0
822	K	e(e,e)	0.186	0.046	0.139	a:0.0 b:0.0 c:0.0 d:0.0 e:0.186 f:0.0 g:0.0
823	K	f(f,f)	0.11	0.029	0.081	a:0.0 b:0.0 c:0.0 d:0.0 e:0.0 f:0.11 g:0.0