Write a Perl program that reads in a distance matrix and outputs the neighbor joining tree in newick format. The distance matrix format is similar to the BLOSOUM62 substitution score matrix we saw earlier. For four sequences the distance would look like

|  | A | B | C | D |
| :--- | :--- | :--- | :--- | :--- |
| A | 0 | 2 | 5 | 4 |
| B | 2 | 0 | 4 | 2 |
| C | 5 | 4 | 0 | 1 |
| D | 4 | 2 | 1 | 0 |

Send your program via email to usman@cs.njit.edu by Wednesday April $25^{\text {th }} 1 \mathrm{pm}$.

