This ReadME file describes the installation and the usage of the wQMC software. The software generates a phylogenetic tree using the Weighted Quartet MaxCut Algorithm.

The theoretic background for this algorithm is given in the article: Weighted Quartets Phylogenetics.

This version is compiled under x86_64 GNU/Linux Ubuntu 10.04.4 LTS

**Input/Output file formats:**
The algorithm can get as input a file with weighted quartets or with unweighted quartets.

The format of a quartet in an unweighted quartets file is \(a, b|c, d\) where \(a, b, c, d\) are integers. The quartets are separated by spaces.

The format of a quartet in a weighted quartets file is \(a, b|c, d:W\) where \(a, b, c, d\) are integers and \(W\) is a fixed point real number. The quartets are separated by spaces.

The output is a tree file that is given in the Newick format. The tree is non weighted.

Examples of input and output files are supplied with the tar file.

**Running the software:**

**Command:** max-cut-tree qrtt=\(<\text{input quartets file name}\>\) weights=on/off otre=\(<\text{output tree name}\>\).

When the given input quartets file includes weighted quartets, the weights parameter should be on for the weights to take effect.