

Thanks for using this program!

First, this program makes use of QPBO package. Please download it and add these files to the directory QPBO\

block.h

instances.inc

QPBO.cpp

QPBO.h

QPBO\_extra.cpp

QPBO\_maxflow.cpp

QPBO\_postprocessing.cpp

Second, this source code can be directly used by calling functions to input the problem and get the output result, and it also supports the input from file and output to file. The file formats are as follows:

**Input format (binary file):s**

NumOfVar NumOfTerm IsInit IsRoundInteger

term1 ... last\_term

For each term, first number of vertices, then indices of vertices, then weight.

If IsInit then Initializaiton (a permutation of vertices)

If IsRoundInteger then an Integer number (used for QPBO, rounding every float number to a integer)

for details, see the input function (ReadProblem) in the source code

**Output format (binary):**

NumOfVar NumOfPartition

XOrder

Coeffs

EndPos: the ending position of each dense components after partition

Singatures: same index for all components of the disjoint partition of a maximal min-sub-permutation

For details of the output, see the function `OutputPartition`

Reading the codes in `ReadProblem()` and `OutputPartition()` is a good way to learn how to use this source code.