The files in this folder comprise 450 randomly generated unweighted test cases for the Constrained Two-dimensional Guillotine Cutting Problem. The examples were proposed in in Morabito and Pureza (2009)’s paper “A heuristic approach based on dynamic programming and and/or-graph search for the constrained two-dimensional guillotine cutting problem” (*Annals of Operations Research*, doi: 10.1007/s10479-008-0457-4, 2009)

The following parameters specification was used for instances generation:

* Plate dimensions (*L*,*W*) : (100,100).
* Number of item types *n* : 10, 20, 30, 40 and 50.
* Item length *li* and width *wi* : sorted from the sets of intervals {[0,10*L*, 0,50*L*], [0,10*W*, 0,50*W*]} (relatively small items), and {[0,25*L*, 0,75*L*], [0,25*W*, 0,75*W*]} ( relatively large items).
* Item demand *bi* : randomly generated within the intervals [1, ] (moderately constrained instances), [1, 4] ( very constrained instances), and set to 1 (extremely constrained instances).

Resulting values of *li*, *wi* and *bi* were rounded.

The instances were organized into three classes and correspondent subfolders: “random class 1” for moderately constrained instances, “random class 2” for very constrained instances, and “random class 3” for extremely constrained instances. For each class, instances were further grouped into two sets: R\_*n*\_S with *n* item types of relatively small sizes, and R\_*n*\_L with relatively large item sizes. Each set comprises 15 examples.

The name of each instance file stands for:

< instance id >\_< *n* >\_< *L* >\_< interval lower bound for generating *li*, and *wi* >\_< interval upper bound for generating *li*, and *wi* >

For each instance file, the data is given as:

< *n* > < *L* > < *W* >

followed by *n* lines providing:

< *li*,\**wi* > < *li*,> < *wi* > < *bi* >