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# Evolutionary Computation Theory and Application Assessment I - Knapsack

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## 1 Hyper parameters

Population size      20  
Generation          50  
Mutation rate      0.04 & 0.06

## 2 Solution

Total Value      595  
Total Weight      369  
Items              map, water, banana, cheese,  
                         camera, trousers, umbrella,  
                         waterproof trousers, water-  
                         proof overclothes, note-case,  
                         towel

## 3 Fitness of each iteration

The following plot shows the maximum fitness (out of 50 runs) each generation with mutation rates 0.04.

