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Program 2

In this program the task was to use simulated annealing to find a good selection of items for a back-country trip to pack in one vehicle which has a capacity of 500 pounds. A list with 400 items was given and each item has a utility 1 to 10, where 1 is an item with the lowest utility and 10 is the highest utility, and a weight.

The program is written in Java using linear data structure, linked list, because it can grow and shrink at runtime by allocating and deallocating memory. So, it won't need an initial size and it helps with efficiency of the memory, so no memory wastage. It also allows to arrange the in sequence the items in a particular order, so it makes easier to implement. Something I feel proud of this program, is that I used Spring Boot to create a web service, so I was able to test it using Postman

Running the program was interesting because its recursivity.