

Exercises:

1. What is memoization? Implement a recursive variant of  $n!$  using memoization.
2. Sub sets
  - a) Write an imperative method, which uses the JDK's *List*. This method should generate a *List* representing the power set of the input *List*. The power set ([https://en.wikipedia.org/wiki/Power\\_set](https://en.wikipedia.org/wiki/Power_set)) is the set of all sub sets of the elements of another set (e.g. a *List*).
  - b) Write a pure fp-style method, which uses the *List* of the *vavr* library. This method should generate a *vavr List* representing the power set of the elements of a passed *vavr List*.

Remarks:

- As always.