Combinatorics

Time Limit: 60 minutes
Use any language to solve.

Write a function, called combinations, that can return a collection of all the combinations of the elements from two input lists. Order of the member tuples is not relevant, but order within each tuple should match the order of the input sequences.

```
a = ("a", "b", "c")
b = (1, 2)
c = ("A", "B")
```

The simple version of the function would work on exactly two inputs lists.

Calling

```
combinations(a, b)
```

Would yield the result

```
("a", 1), ("a", 2), ("b", 1), ("b", 2), ("c", 1), ("c", 2)
```

The choice of data structures to use for inputs and output is language specific, but is ultimately up to you as the implementer.

If you have time, the more advanced version of the function would work on 0 or more input lists.