

WP1

```
def build_index(doc):
    index = {}
    for k in d:
        words = d[k].split()
        for w in words:
            if w in index:
                if k in index[w]:
                    index[w][k] += 1
                else:
                    index[w][k] = 1
            else:
                index[w] = { k: 1 }
    return index
```

Python data structures, Part II

WP2

```
def search_index(index, query):
    words = query.split()
    docs = {}
    for w in words:
        if w in index:
            for d in index[w]:
                if d in docs:
                    docs[d] += index[w][d]
                else:
                    docs[d] = index[w][d]
    return docs
```

Array-backed list

WP3

```
class ArrayList:
    def __init__(self):
        self.data = []

    def truncate(self, start, stop):
        for i in range(start, stop):
            self.data[i-start] = self.data[i]
        for _ in range(len(self.data) - (stop - start)):
            del self.data[len(self.data)-1]
```