

## BLOCK NONCE #4: Use the standard library

### What?

Rust (and Python) have large standard libraries. Use them to replace short loops and common patterns.

### Why?

When we use the standard library the code is shorter, easier to write and easier to understand.

### How?

```
let mut index = 1;
for item in shopping_list.iter() {
    println!("{}", index, item);
    index += 1;
}
```

becomes

```
for (index, item) in shopping_list.iter().enumerate() {
    println!("{}", index + 1, item);
}
```


```
if !words_per_length.contains_key(&len) {
    words_per_length.insert(len, 0);
}
*words_per_length.get_mut(&len).unwrap() += 1;
```

becomes

```
*words_per_length.entry(len).or_insert(0) += 1;
```

There are many others:

- `vec!["A", "B", "C"].join(", ") → "A, B, C"`
- `vec![1, 2, 3, 4, 5].chunks(2) → [[1, 2], [3, 4], [5]]`
- `(487 as u32).next_multiple_of(100) → 500`

**TIP**  Most of the examples here have Python equivalents