

Lecture #15 Coroutines

Range Iterator:

- what does Range create?
 - an iterator
- how to get next element?
 - call the iterator → a closure.
- how to determine 'end':
 - return null.

Implement range(s, e)

```
function range(s, e) {  
  cnt = s - 1;  
  return function() {  
    cnt++;  
    if (cnt < e) cnt  
    else null  
  }  
}
```

Desugar for:

```
for v in E { Stmt }
```

```
→ var it = E  
  var v = it()  
  while (v != null) {  
    S  
    v = it()  
  }
```


for (it = E, v = it(); v != null; v = it()) { S }

yield & resume.

return & call.

Asymmetric coroutine.

c = create_coroutine(body)

resume(c, args)

return at the end \rightarrow implicit yield.