lecture_23

October 16, 2022

1 Lecture 23

[7]:
```
def foo(num):
    num += 12
    yield num
    num += 24
    yield num
```

[8]:
```
f = foo(42)
```

[9]:
```
next(f)
```

[9]:
```
54
```

[10]:
```
next(f)
```

[10]:
```
78
```

[11]:
```
next(f)
```

```
---------------------------------------------------------------------------
StopIteration                             Traceback (most recent call last)
Input In [11], in <cell line: 1>()
----> 1 next(f)

StopIteration:
```

[29]:
```
def foo(num):
    default_offset = 12
    num += default_offset
    i = (yield num)
    if i is None:
        i = default_offset
    num += i
    yield num
```

[30]:
```
g = foo(42)
```

[31]:
```
next(g)
```

[31]: 54

[32]:
```
g.send(16)
```

[32]: 70

[33]:
```
next(g)
```

```
---------------------------------------------------------------------------
StopIteration                             Traceback (most recent call last)
Input In [33], in <cell line: 1>()
----> 1 next(g)

StopIteration:
```

[40]:
```
from itertools import count

def factorial():
    start = 1
    for i in count(1):
        start *= i
        yield start
```

[41]:
```
f = factorial()

for idx, val in enumerate(f):
    print(val)
    if idx == 20:
        f.close()
```

```
1
2
6
24
120
720
5040
40320
362880
3628800
39916800
479001600
6227020800
87178291200
1307674368000
```

20922789888000
355687428096000
6402373705728000
121645100408832000
2432902008176640000
51090942171709440000

1.1 Problem 1

[42]:
```
WORD = "CAR"

n = int(input())


# n = 5

#         C
#       A C A
#     R A C A R
#   C R A C A R C
# A C R A C A R C A


# WORD = "TEST"

# n = 4

#       T
#     E T E
#   S E T E S
# T S E T E S T
```

```
5
```

[43]:
```
from itertools import cycle
```

[44]:
```
WORD * 2
```

[44]:
```
'CARCAR'
```

[ ]:
```
WORD * math.ceil(n // len(WORD))
```