what does each program print?

def pow2(n):

if n == 0:

return 1

else:

return 2 \* pow2(n-1)

print(pow2(3))

def get\_nums():

print("A")

yield 100

print("B")

yield 200

for x in get\_nums():

print("hi")

print(x)

def flip(x):

return -x

def special\_sum(nums, transform):

total = 0

for num in nums:

total += transform(num)

return total

print(special\_sum([-4, 1, -2, 0], flip))

def backwards(items):

for i in range(len(items)):

yield items[-i] # careful!

for x in backwards(["A", "B", "C", "D"]):

print(x)

words = ["AA", "B", "CCC"]

words.sort(key=len)

print(words)

for i in range(5):

try:

print(2 / (i-2))

except:

print("yikes!")

nums = []

def append\_nums(n):

nums.append(n)

if n > 1:

append\_nums(n-1)

nums.append(n \* 100)

append\_nums(1)

append\_nums(3)

print(nums)

def hello():

print("hi")

def goodbye():

print("bye")

def multi\_call(n, fn):

if fn != None:

for i in range(n):

fn()

multi\_call(2, hello)

multi\_call(3, goodbye())