

what does each program print?

1

```
def pow2(n):
    if n == 0:
        return 1
    else:
        return 2 * pow2(n-1)
print(pow2(3))
```

```
def flip(x):
    return -x
```

2

```
def special_sum(nums, transform):
    total = 0
    for num in nums:
        total += transform(num)
    return total
```

```
print(special_sum([-4, 1, -2, 0], flip))
```

3

```
for i in range(5):
    try:
        print(2 / (i-2))
    except:
        print("yikes!")
```

```
nums = []
```

4

```
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)
```

5

```
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())
```