

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())
```