

고급통계프로그래밍 과제 # 2

2017580034 통계학과 이유민

Ex 3.4

In [1]:

```
def do_twice(f):  
    f()  
    f()
```

In [2]:

```
#3.4-1  
def print_spam():  
    print('spam')  
  
do_twice(print_spam) #test
```

spam
spam

In [3]:

```
#3.4-2  
def do_twice(f,x): #two arguments  
    f(x)  
    f(x)
```

In [4]:

```
#3.4-3  
def print_twice(a):  
    for i in range(2): #2회 실행  
        print(a)  
  
print_twice('spam')
```

spam
spam

In [5]:

```
#4.4  
do_twice(print_twice, 'spam')
```

spam
spam
spam
spam

In [6]:

```
#4.5
def do_four(f,x): #do_four function takes a function object and a value
    for i in range(4): #4회 실행
        f(x)

do_four(print_twice, 'spam') #print_twice를 4회 실행 > spam이 8번 print
```

spam
spam
spam
spam
spam
spam
spam
spam

Ex 5.3

In [7]:

```
#5.3-1
def check_fermat(a,b,c,n):

    # a, b, c, n 인자로 페르마의 정리 성립 여부 판단
    if n>2 and a**n + b**n == c**n:
        print('Holy smokes, Fermat was wrong!') #성립X
    else:
        print("No, that doesn't work.") #성립O
```

In [8]:

```
check_fermat(4,6,3,2) #check
```

No, that doesn't work.

In [9]:

```
#5.3-2
def check_fermat_2():

    #a, b, c, n값 입력 후 정수변환
    a = int(input())
    b = int(input())
    c = int(input())
    n = int(input())

    # check_fermat 으로 페르마의 정리 만족여부 검사한 결과 return
    return check_fermat(a,b,c,n)
```

In [10]:

```
check_fermat_2() #check
```

4

3

5

6

No, that doesn't work.