Week5

20171677 이정하 20171688 임이현
20171693 장우혁 20171701 정지현

```
def iterfibo(nbr):
    sum = 0
    before = 0
    after = 1
    if nbr == 1 or nbr == 2:
        return 1

    elif nbr > 2:
        for i in range(nbr - 1):
            sum = before + after
            before = after
            after = sum

    return sum
```

20171677

```
def iterfibo(nbr):
    sum = 0
    before = 0
    after = 1
    if nbr == 1 or nbr == 2:
        return 1

    elif nbr > 2:
        for i in range(nbr - 1):
            sum = before + after
            before = after
            after = sum

    return sum
```

```
def iterfibo(nbr):
    sum = 0
    before = 0
    after = 1
    if nbr <= 1:
        return nbr

elif nbr > 2:
    for i in range(nbr-1):
        sum = before + after
        before = after
        after = sum

return sum
```

20171677

```python
def iterfibo(n):
    a = 1
    b = 1
    for i in range(1,n+1):
        if (i >2):
            tmp = a
            a = b
            b = a + tmp
    return b
```

20171688

```python
def iterfibo(n):
    a = 1
    b = 1
    for i in range(1,n+1):
        if (i >2):
            tmp = a
            a = b
            b = a + tmp
    return b
```

```
20  20  nbr = int (input("Enter a number: "))
21  21      if nbr == -1:
22  22          break
    23  +   elif nbr < -1:
    24  +       print(" -1 보다 큰 값을 입력해주세요 ")
    25  +       nbr = int(input("Enter a number: "))
23  26      ts = time.time()
24  27      fibonumber = iterfibo(nbr)
25  28      ts = time.time() - ts
```

20171688

```
def iterfibo(n):
    a = 1
    b = 1
    for i in range(1,n+1):
        if (i >2):
            tmp = a
            a = b
            b = a + tmp
    return b
```

```
            tmp = a
            a = b
            b = a + tmp
+       if n==0:
+           b=0
    return b
```

20171688

```
def iterfibo(n):
        if n == 0:
                return 0
        elif 0 < n <= 2:
                return 1
        elif n == 3:
                return 2
        a = 1
        b = 1
        nn = (n - 2) // 2
        for i in range(nn):
                a = a + b
                b = a + b
if n % 2 == 0:
        return b
else:
        a = a + b
        return a
```

20171693

```
def iterfibo(n):
        if n == 0:
                return 0
        elif n == 1:
                return 1
        oddNumber = 1
        evenNumber = 1
        nn = (n - 2) // 2
        for i in range(nn):
                oddNumber = oddNumber + evenNumber
                evenNumber = oddNumber + evenNumber
    if n % 2 == 0:
                return evenNumber
    else:
                oddNumber = oddNumber + evenNumber
                return oddNumber
```

20171693

```
def iterfibo(n):
    fibo = [0, 1]
    for i in range(2, n+1):
        fibo.append(fibo[i-2] + fibo[i-1])
    return fibo[n]



n = int(input("Enter a number: "))

while n != -1:
    start = time.time()
    num = iterfibo(n)
    end = time.time()
    print("iterfibo(%d)=%d, time %.6f" % (n, num, end - start))
    start = time.time()
    num = recurfibo(n)
    end = time.time()
    print("recurfibo(%d)=%d, time %.6f" % (n, num, end - start))
    n = int(input("Enter a number: "))
```

20171701