CS-TA 题目

五道选择+一道编程
范围：MIT 前两周内容

(Jerry)1. Indicate the value returned in the following expression.
'internet'[:1] + 'c' * '2'

A. 'icc'
B. 'incc'
C. 'ncc'
D. Error

Answer: D   TypeError: can't multiply sequence by non-int of type 'str'

(David Xing)2. What is the output of this program?

a=83
while(a):
print(a%2,end='')
a=a//2

A.1100101 B.1010011 C.1010101 D.1101001

Answer: A

(Helen)3. What is the output of this program?

x=12
def f(x):
    a=10
    a=x+1
    def g(y):
        return a+y
    return g(3)
print(f(x))

A. 13   B.3   C. 16   D. Error

Answer: C

(David Xiong)4. What is the output of this program?

a = 1
b = 2
def switch(x,y):
x = y
y = x
return x, y
print(switch(a,b))

A. 1,1   B. 1,2   C. 2,1 D. 2,2

Answer: D

(Hanbo)5. What are the outputs of this following programs?

```
def func(Grade, Class, Name):
        return '{}{} - {}'.format(Grade, Class, Name)

print(func('S2', 'C1', 'Wudi'))
print(func('S2', 'C1', Name='Wudi'))
print(func('S2', Class='C1', 'Wudi'))
print(func(Name='Wudi', Grade='S2', Class='C1'))
```

A. 'S2C1 - Wudi', Error, Error, Error
B. 'S2C1 - Wudi', 'S2C1 - Wudi', Error, 'S2C1 - Wudi'
C. Error, 'S2C1 - Wudi', 'S2C1 - Wudi', Error
D. Error, Error, 'S2C1 - Wudi', 'S2C1 - Wudi'

Answer: B

(Charlie)6. Write a code to determine whether the number entered by the user is in the Fibonacci sequence.

1, 1, 2, 3, 5, 8, 13, 21, 34...

[Try to break the problem down into parts and do it step by step. How to print a Fibonacci se-

```
n = eval(input('fib:'))
count = 1
def fibo(x):
    before = 0
    after = 1
    if x == 0 or x == 1:
        return x

    if x <= 3:
        return 1
    return fibo(x-1)+fibo(x-2)

while fibo(count) < n:
    count+=1
if fibo(count) == n:
    print ('yes, the',count-1,'th item')
else:
    print('niet')
```

quence using python? How to determine whether the user's input is in the sequence?]


```
a=1
b=1
count=0
n=eval(input('number:'))
while b<n:
    b,a=a+b,b
    count+=1
if b==n:
    print ('yes, the',count+2,'th item')
else:
    print('niet')
```