1. What would be printed on the screen when the following program is executed?

```
a. (2 points)
def CT1(n):
    for i in range(n):
        n = n + 1
    print (n)
CT1(4)
```

b. (2 points)

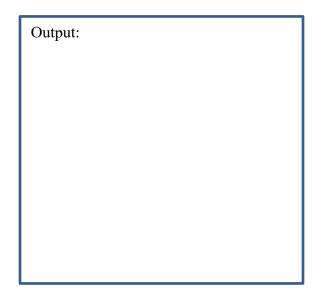
```
def CT2(a,b):
    s = 0
    for i in range(a,b):
        s = s + i
        print (s)
        if i%4 == 0:
            return 0
        if i%5 == 0:
             return 1
        print ("Total Sum = ",s)
        return s
print (CT2(6,10))
```

Output:		

Output:

c. (2 points)

```
def CT3():
    A = [1,0,2]
    B = [4,3,8,7]
    for i in A:
        print (B[i]- i)
CT3()
```



2. (3 points) A fixed point in an array is an element whose value is equal to its index. Given an array a, return the number of fixed points, if any. If there are no fixed points, return False.
For example, given [0, 0, 2, 40], you should return 2. Given [1, 5, 7, 8], you should return False.
def fixedPoints(a):
Add your code here

3. Given the following function, give me a value for x, that will cause the function to return True (1 point)

```
def foo(x):
    assert (10**2 < x and x < 10**3)
    if x % 4 != 0 and x%4 != 1:
        return True
    return False
print (foo(______))  # this should print True</pre>
```