Big Data with Python

By Odin Outsourching

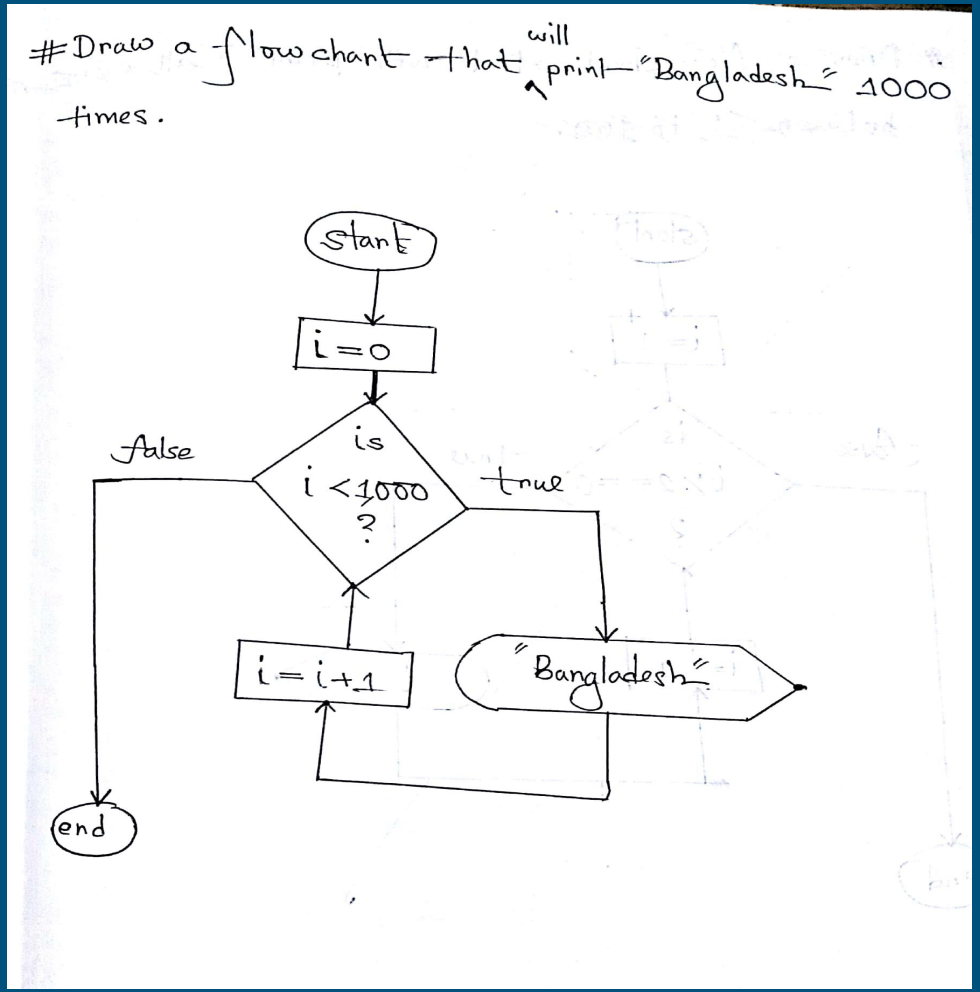
Motivational video

1. TEDx: https://www.youtube.com/watch?v=xfBWk4nw440

Iteration Learning Resources

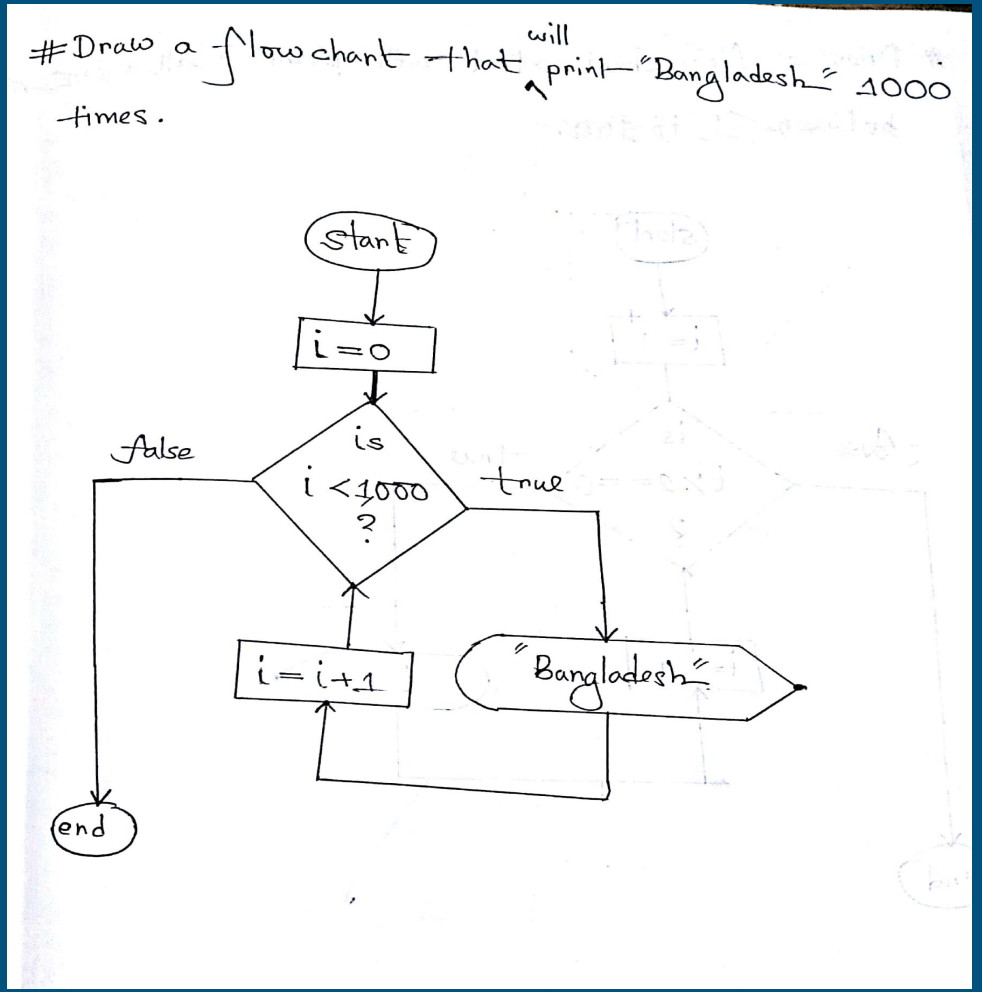
1. https://www.learnpython.org/en/Loops
2. https://www.geeksforgeeks.org/loops-in-python

Iteration-1


#Draw a flowchart that will print "Bangladesh" 1000 times.
start
i=0
is i<1000 ?
false
true
i=i+1
"Bangladesh"
end

Iteration-1

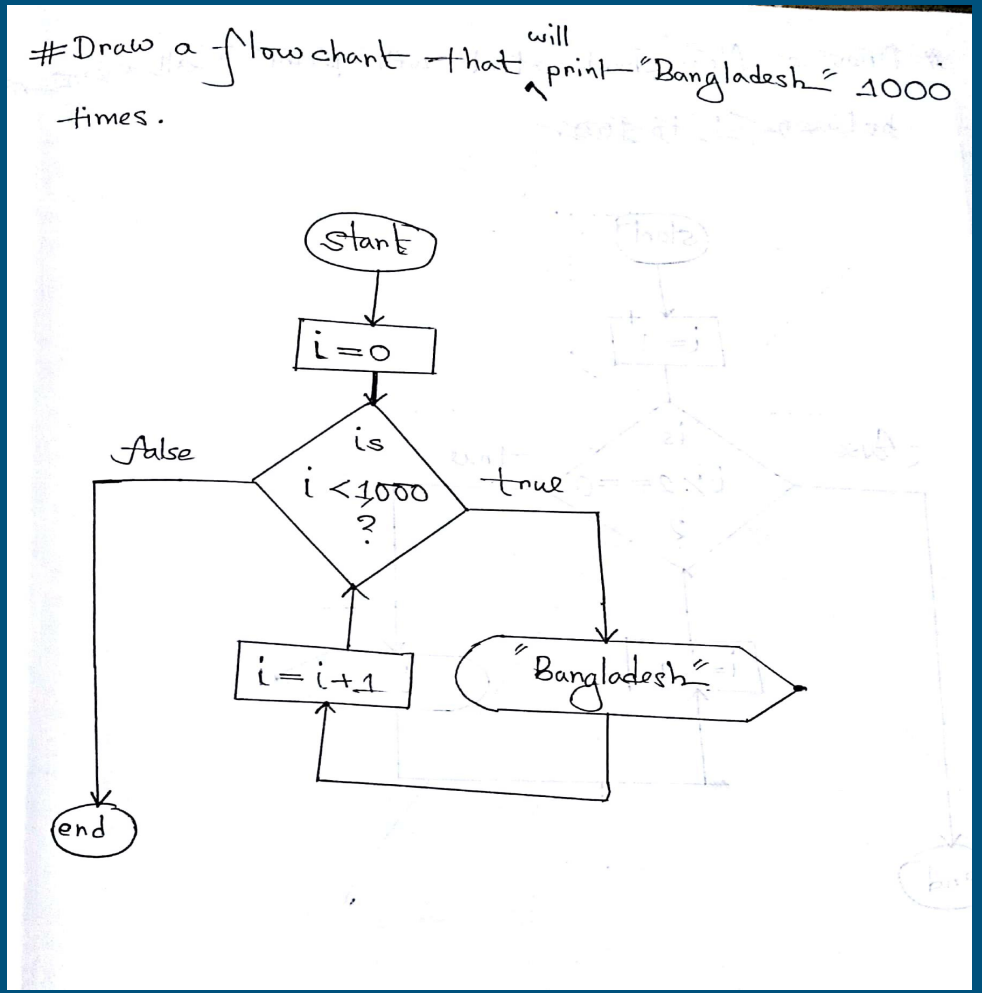
```
i=0
while i<10:
    print('Bangladesh')
    i=i+1
```



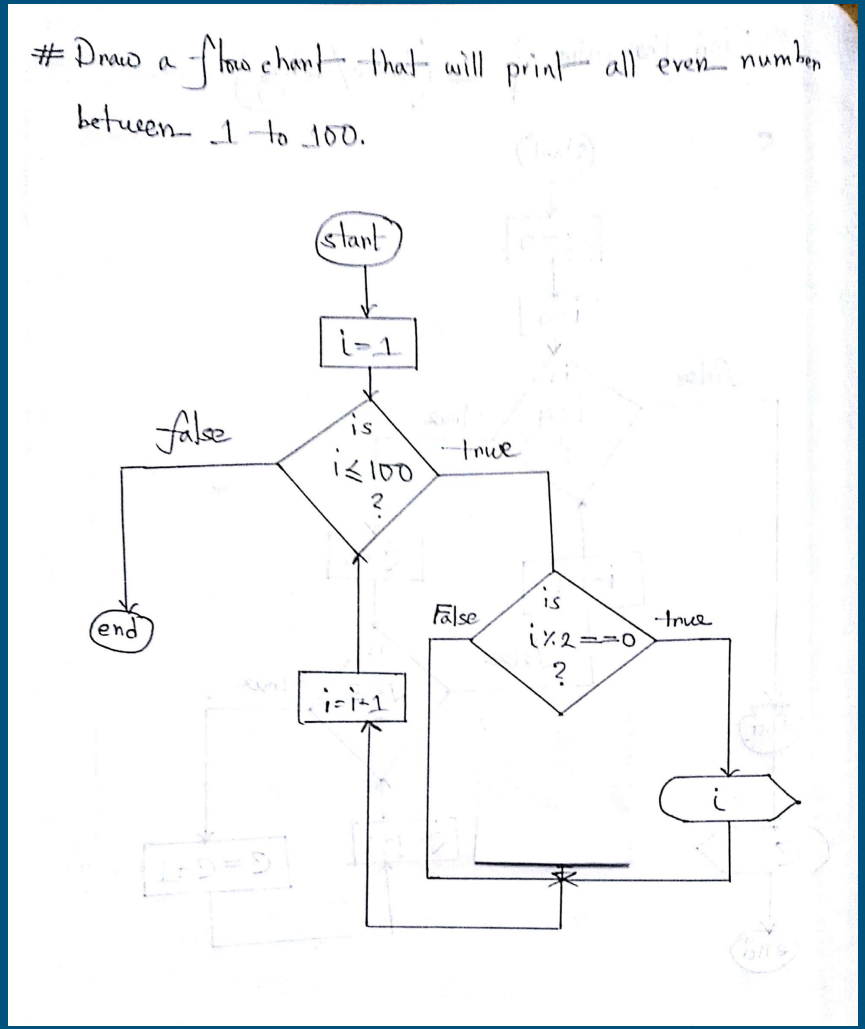
Iteration-1

```
i=0
while i<10:
    print('Bangladesh')
    i=i+1
```

```
for i in range(0, 10):
    print('Bangladesh')
```



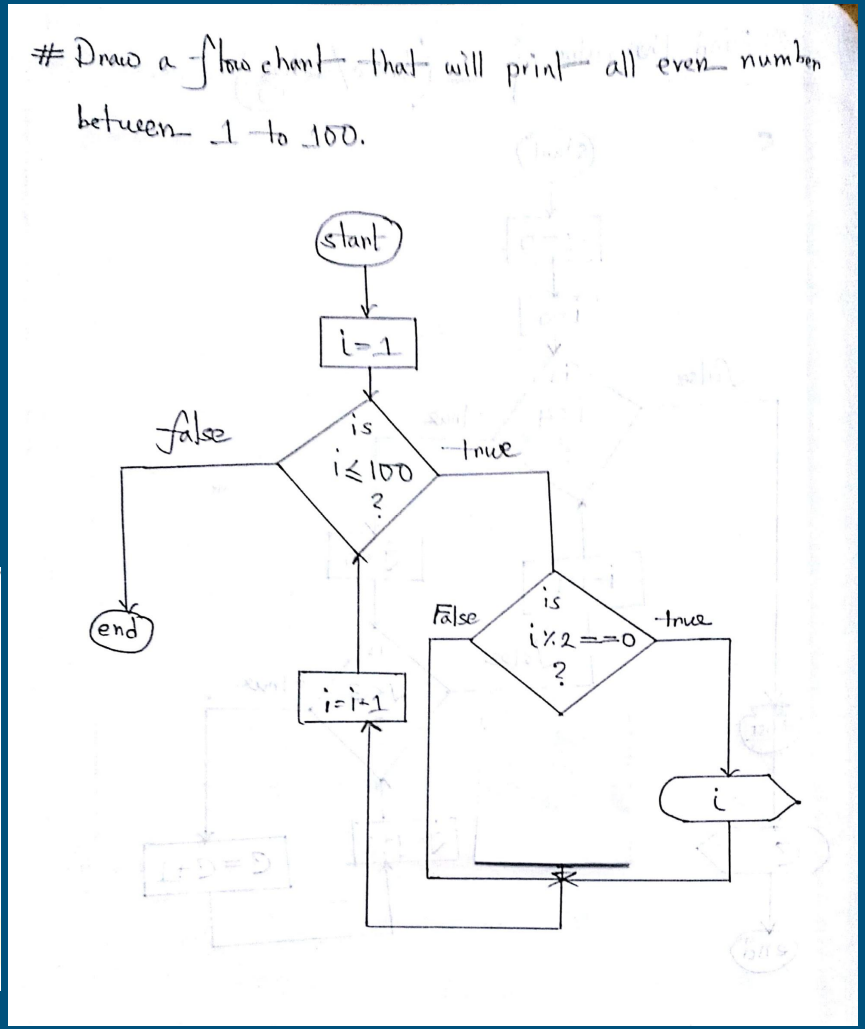
Iteration-2


Draw a flow chart that will print all even numbers between 1 to 100.
start
i=1
is i≤100 ?
false
true
end
is i%2==0 ?
false
true
i=i+1
i

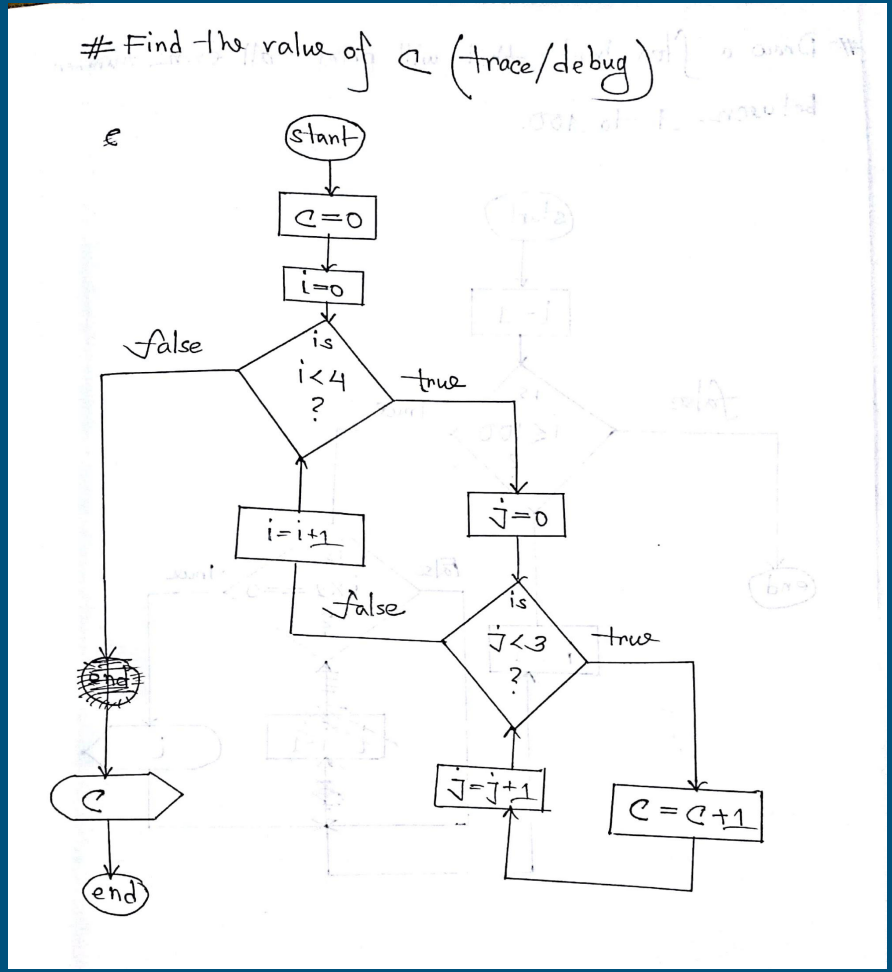
Iteration-2

```
i = 0

while i<=100:
    if i % 2 == 0:
        print(i)
    else:
        None

    i = i+1
```

```
i = 1

while i<=100:
    if i%2==0:
        print(i)

    i = i+1
```

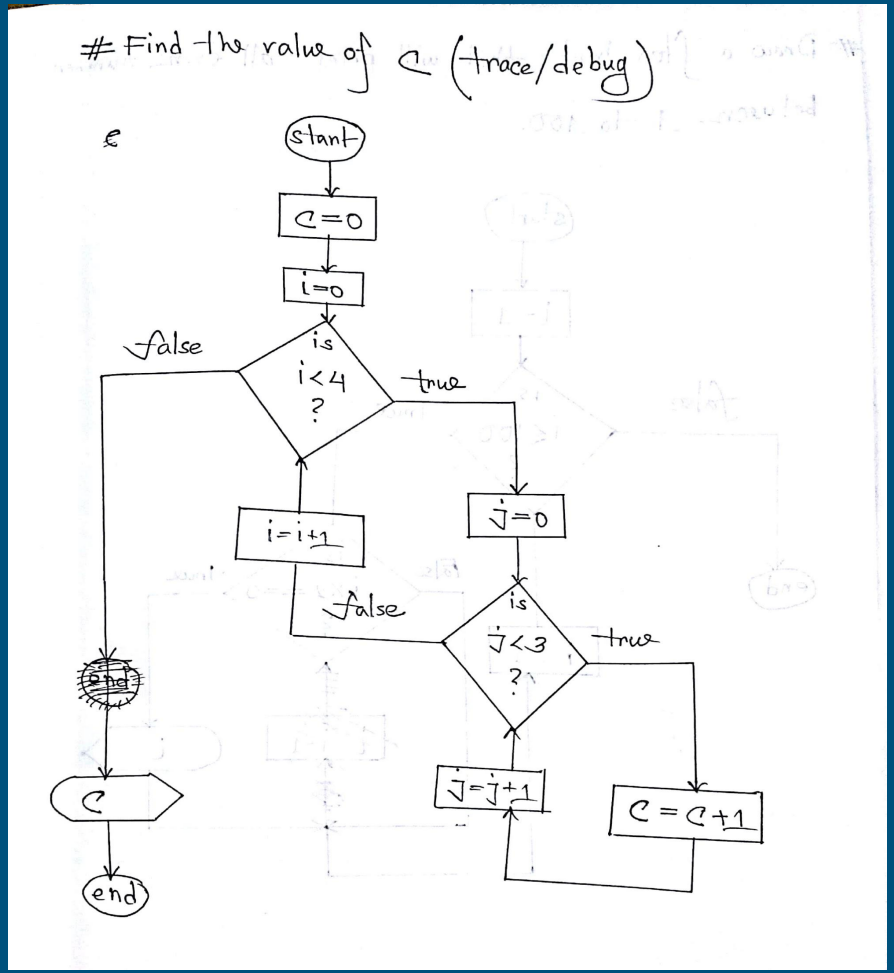


Iteration-3

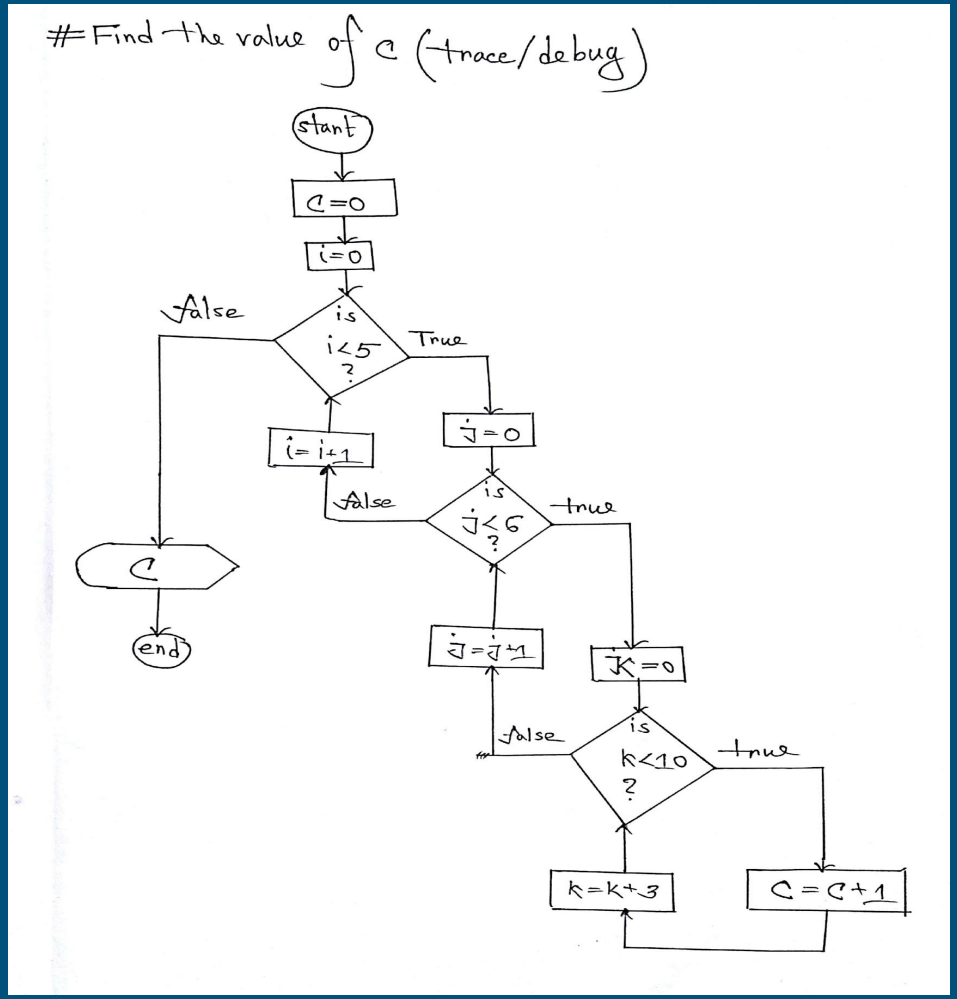

Find the value of c (trace/debug)
start
c=0
i=0
is i<4 ?
false
true
i=i+1
j=0
false
is j<3 ?
true
end
c
j=j+1
c=c+1
end

Iteration-3

```
C=0

i=0
while i<4:
    j=0
    while j<3:
        C=C+1
        j = j+1
    i = i+1

print(C)
```

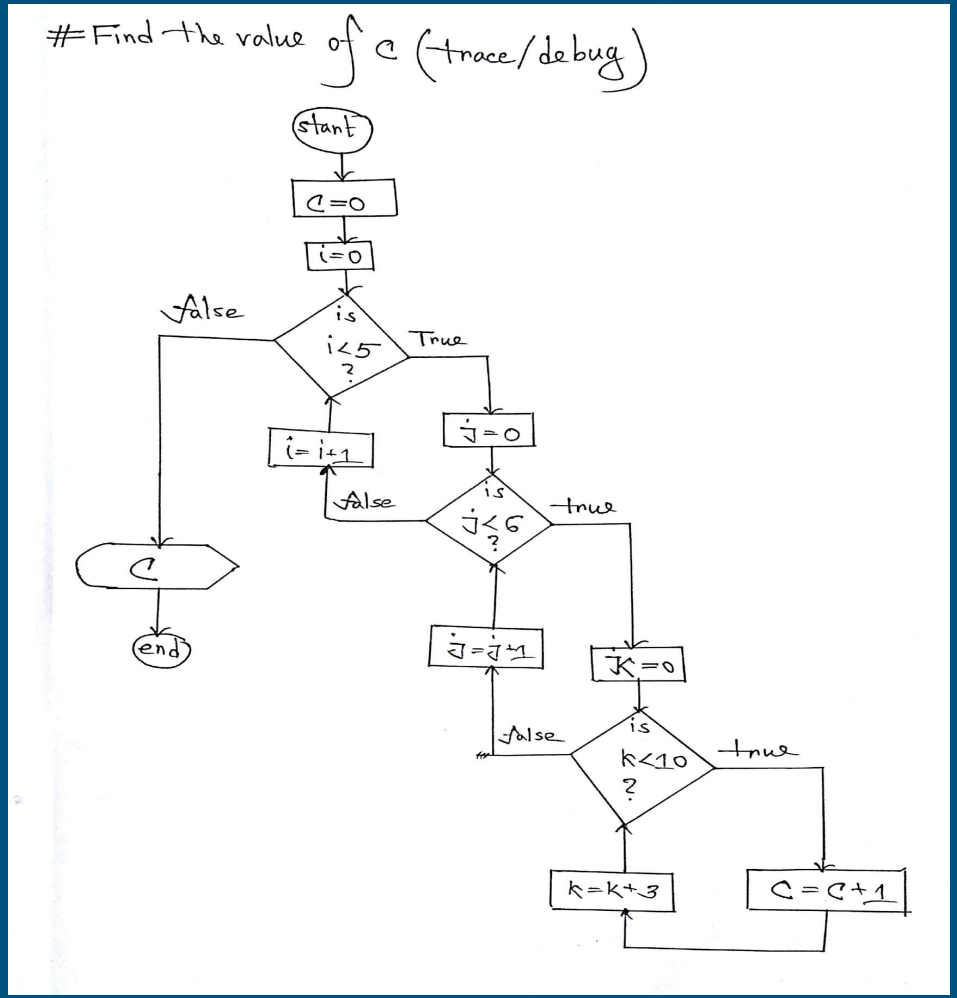


Iteration-4


#Find the value of c (trace/debug)
start
c=0
i=0
is i<5 ?
False
True
c
end
i=i+1
j=0
is j<6 ?
False
true
j=j+1
k=0
is k<10 ?
false
true
k=k+3
c=c+1

Iteration-4

```
C=0

i=0
while i<5:
    j=0
    while j<6:
        k=0
        while k<10:
            C=C+1
            k = k+1
        j=j+1
    i=i+1

print(C)
```



Problem Solving

1. Input a number, then reverse it. (1234 to 4321; 596254 to 452695).
2. Check a number whether it is palindrome or not.
3. Count the digit of a number.
4. Count the unique-digit of a number.
5. Take two inputs, base(b) and power(p) determine the value.
6. Fibonacci Series (0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89 … upto N)
7. Print series: 3, 6, 9, 12, 15, 18, 21, 24, 27 upto N.
8. Print 3n+1 series (if number is even then n=n/2, otherwise n=3n+1).
9. Factorial (3! = 6, 4! = 24, 5! = 120, 6! = 720, 7! = 5040)

Contract your instructor!

Find Me: http://rafsanjani.pythonanywhere.com/contact

Course Website: https://mrzresearcharena.github.io/Big-Data-using-Python

Thank you!