FOR LOOPS :

=> Maths session on Saturday : (optional)

Time : 9 am
Durath : 1.5 hr to 2 hr.

* For loops :

* Range function

- Iterable
- It gives a series of integers to you.
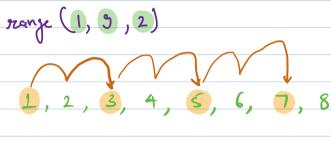
Syntax

★ range (start , end , jump)
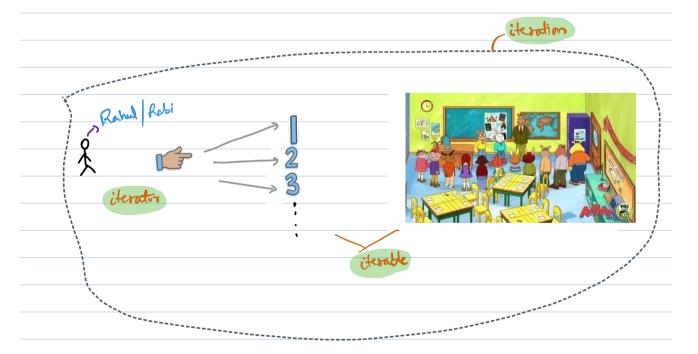
start => included
end => excluded

i)   range (end)   → end value

       start = 0
       jump   = 1

→   range (5)

       start = 0
       end   = 5   end is exclusive
       jump   = 1

       0, 1, 2, 3, 4, ~~5~~

Quiz :

range (11)

⇒   0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, ~~11~~

                    included   excluded
ii)   range (start , end)

       jump = 1

range (1, 5) : 1, 2, 3, 4 ~~5~~

iii)   range (start, end, jump)

range (1, 9 , 2)

1 , 2 , 3 , 4 , 5 , 6 , 7 , 8

Ans :   1 , 3, 5, 7

★ Iterator , Iterable, Iteration

iteration

Rahul / Rabi

1
2
3
⋮

iterator

iterable

⇒   for loops

⇒

    for   iterator   in   iterable :

```
┌─────────────┐
│     Body    │
└─────────────┘
```

★   Syntax   difference

start = 1	for i in range(1,6):
while start <= 5 :	print(i)
print (start)	
start += 1	

★   Given :   i)   start = 0
                    ii   end   = n   (included)
                    (iii)   i/p → n

     find :   i)   Count
                ii)   even

solution :   ⇒   range (0, n+1, 2)   ⇒ even no.

                    ⇒   increment count
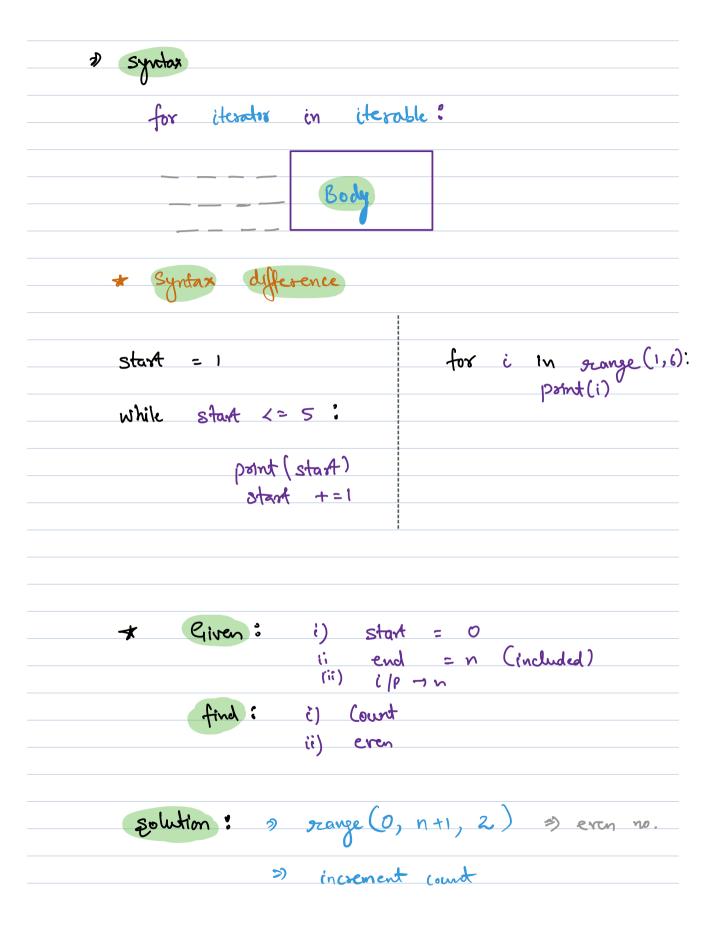
code :

```
n = int (input())

count = 0

for i in range (0, n+1, 2):

        count += 1

print (count)
```