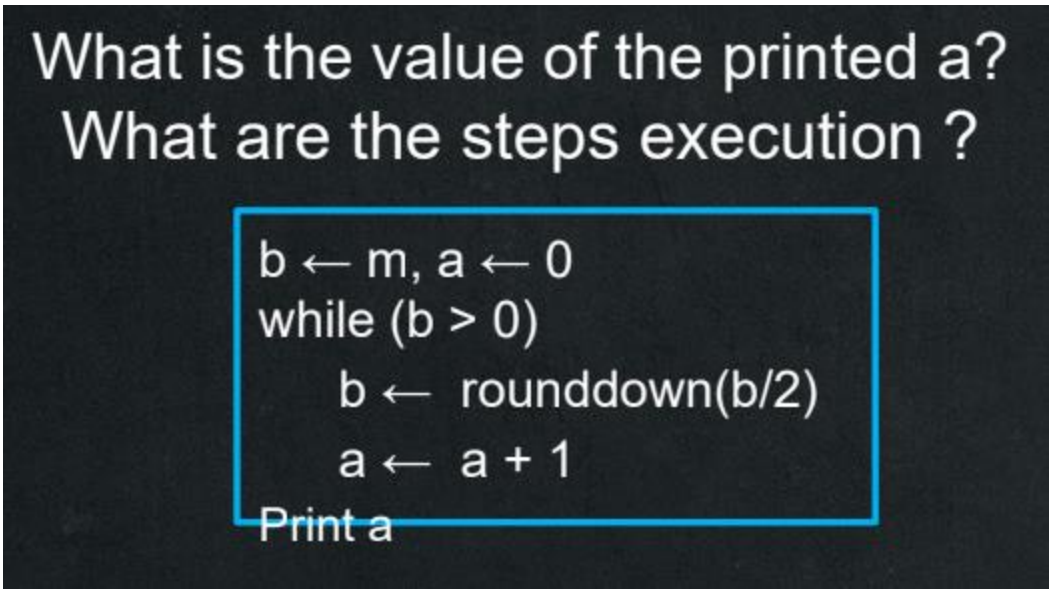


Value of “a” according above problem

a = RoundDown($\log_2(m)$) + 1

Step that executes this program is

initialize		
variable	value	
m	16	
b	16	
trace table		
b	a	b>0
16	0	TRUE
8	1	TRUE
4	2	TRUE
2	3	TRUE
1	4	TRUE
0	5	FALSE

What is the value of the printed a?
What are the steps execution ?

```
For a graph G ← (V,E)
a ← m
for (each vertex u in v)
    for (each vertex w adjacent to u)
        a ← a + 1
Print a
```

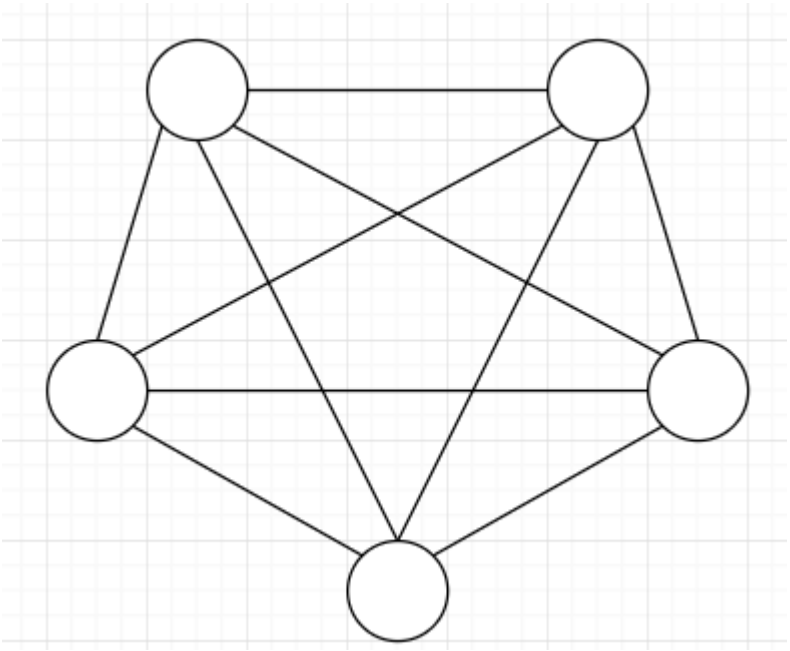
Value of “a” according above problem

a = m + (E x 2)

Step of execution

given a graph

G <- (5,10)



First iteration

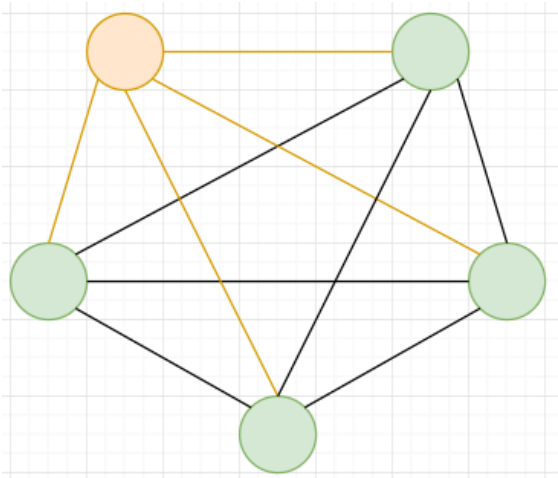
according the pseudocode

it chooses 1 node and reach their

adjust node

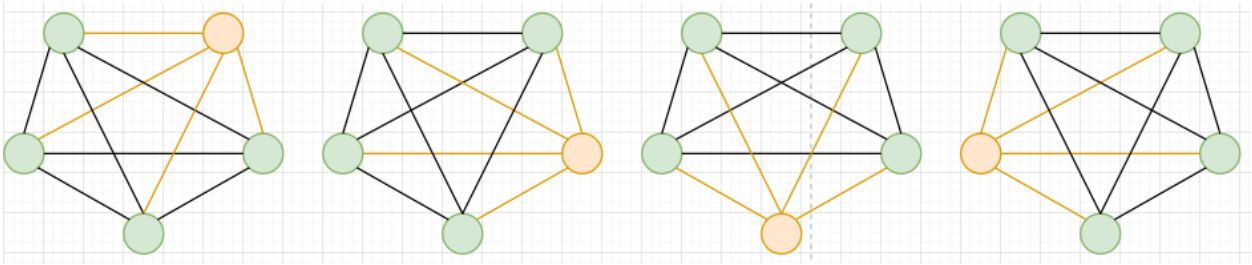
each adjust node reached increase

“a” by 1 in my example it increases



“a” by 4 for each node the iteration chooses.

Do it util all node is choosing



Now a will be

a + m + 4 + 4 + 4 + 4 + 4 or a + m + 20

or a + m + (10 x 2)