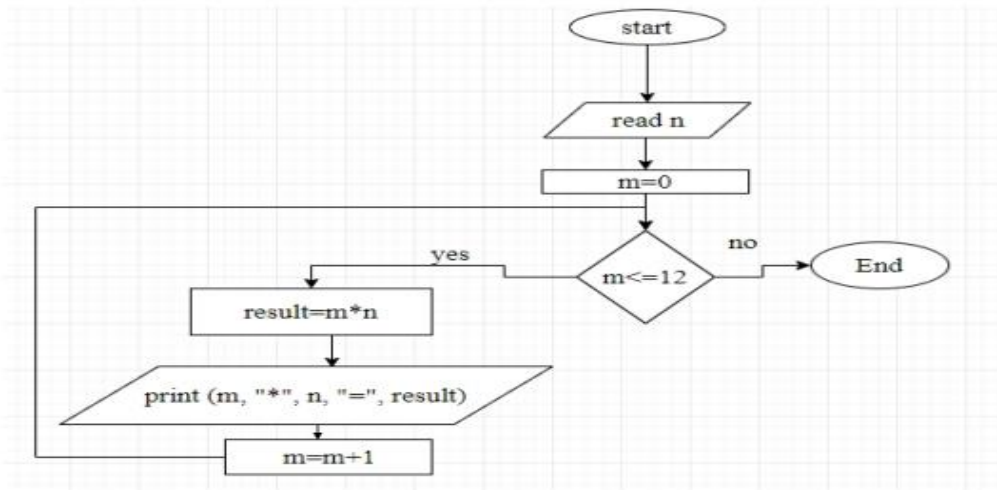


## 08 – Flowchart Arabic

### Trace Table

- 1- What does the algorithm do?
- 2- Trace with  $n=4$



<b>n</b>	<b>m</b>	<b>m &lt;= 12</b>	<b>res</b>	<b>print</b>
4	0	true	0	0
4	1	true	4	4
4	2	true	8	8
4	3	true	12	12
4	4	true	16	16
4	5	true	20	20
4	6	true	24	24
4	7	true	28	28
4	8	true	32	32
4	9	true	36	36
4	10	true	40	40
4	11	true	44	44
4	12	true	48	48
4	13	false	-	-

1. Trace the following pseudocode algorithm for  $n = 48$ .
2. How many *iterations* of the loop are computed?

```

Input n
For(i=0, i<=10 ,i++)
    If (n %2 == 0)
        n=n/2
    Else
        break
    EndIf
Output n
EndFor

```

n	i	i<=10	n%2==0
48	0	√	√
24	1	√	√
12	2	√	√
6	3	√	√
3	4	√	X (exist)

24
12
6
3

**of iterations = 5**