~~Total no. of executions of the executable statements in the else block~~

$\cancel{: 2\cdot(2^0+2^1+2^2+2^3+\ldots+2^{n-1}) = 2\cdot(2^n-1) = \boxed{2^{n+1}-2} + (2^{n+1}-2) = 2^n\cdot 3-4}$

$\cancel{+ (2^1+2^2+2^3+\ldots+2^{n-1}+2^n) = (2^{n+1}-2)}$

- The if statement on line 4 is executed $(2^0+2^1+2^2+\ldots+2^n) = (2^{n+1}-1)$ times
- The if block is executed 2^n times overall.
- The for stmt is executed for $2^n\cdot(n+1)$ times
- The truth values are printed for $2^n\cdot n$ times
- The newline is printed for 2^n times.

~~Total step count:~~ $\cancel{(2^{n+1}-2)+(2^{n+1}-1)+2^n(n+1)+2^n n+2^n}$

$\cancel{= n\cdot 2^{n+1}+3\cdot 2^{n+1}-5 = \boxed{(n+3)\cdot 2^{n+1}-5}}$

Total step count: $(2^n\cdot 3-4)+(2^{n+1}-1)+2^n\cdot(n+1)+2^n\cdot n+2^n$

$= 2^n\cdot(3+2+1+1+n+n)-5 = 2^n\cdot(2n+7)-5 =$

$= 2^{n+1}(n+3)+2^n-5$ (Wrong)

Total no. of executions of the executable statements in else block:

$2\cdot(2^0+2^1+2^2+2^3+\ldots+2^{n-1})+(2^1+2^2+2^3+\ldots+2^{n-1}+2^n)$

$= 2(2^n-1)+(2^{n+1}-2) = 2\cdot(2^{n+1})-4$

Total step count: $2\cdot(2^{n+1})-4+2^{n+1}-1+2^n\cdot(n+1)+2^n\cdot n+2^n$

$= 2^{n+1}(2+1+1)-5+2^{n+1}\cdot n = 2^{n+1}(n+4)-5$

$= 2^{n+1}(n+3)+2^{n+1}-5 = 2^n(2n+6)+2^{n+1}-5$