

Assignment

6 Aug.

```
for (int i=1; i<=30; i++) {
    if (i%3==0)
        s.o.p(i);
}
```

$i <= 30$	$i \% 3 == 0$	s.o.p(i)	O/P
$1 <= 30 \checkmark$	$1 \% 3 == 0 \times$		
$2 <= 30$	$2 \% 3 == 0 \times$		
$3 <= 30$	$3 \% 3 == 0 \checkmark$	\checkmark	3
$4 <= 30$	$4 \% 3 == 0 \times$		
$5 <= 30$	$5 \% 3 == 0 \times$		
$6 <= 30$	$6 \% 3 == 0 \checkmark$	\checkmark	6
$7 <= 30$	$7 \% 3 == 0 \times$		
$8 <= 30$	$8 \% 3 == 0 \times$		
$9 <= 30$	$9 \% 3 == 0 \checkmark$	\checkmark	9
$10 <= 30$	$10 \% 3 == 0 \times$		
$11 <= 30$	$11 \% 3 == 0 \times$		
$12 <= 30$	$12 \% 3 == 0 \checkmark$	\checkmark	12
$13 <= 30$	$13 \% 3 == 0 \times$		
$14 <= 30$	$14 \% 3 == 0 \times$		
$15 <= 30$	$15 \% 3 == 0 \checkmark$	\checkmark	15
$16 <= 30$	$16 \% 3 == 0 \times$		
$17 <= 30$	$17 \% 3 == 0 \times$		
$18 <= 30$	$18 \% 3 == 0 \checkmark$	\checkmark	18
$19 <= 30$	$19 \% 3 == 0 \times$		
$20 <= 30$	$20 \% 3 == 0 \times$		
$21 <= 30$	$21 \% 3 == 0 \checkmark$	\checkmark	21
$22 <= 30$	$22 \% 3 == 0 \times$		
$23 <= 30$	$23 \% 3 == 0 \times$		
$24 <= 30$	$24 \% 3 == 0 \checkmark$	\checkmark	24
$25 <= 30$	$25 \% 3 == 0 \times$		
$26 <= 30$	$26 \% 3 == 0 \times$		
$27 <= 30$	$27 \% 3 == 0 \checkmark$	\checkmark	27

$28 < 30$

$28 \% 3 == 0 \times$

x

$29 < 30$

$29 \% 3 == 0 \times$

x

$30 < 30$

$30 \% 3 == 0 \checkmark$

✓

30

$31 < 30 \times$

decomposition

for (i=1; i<=30; i++) {

if (i%3==0 & i%2==0)

i<=30	if (i%3==0)	(i%2==0)	S.O.P	S.O.P	O/P	even or P
1<=30	1%3==0 x	1%2==0 x				
2<=30	2%3==0 x	2%2==0 L				
3<=30	3%3==0 L	3%2==0 x		✓	3	
4<=30	4%3==0 x	4%2==0 L				
5<=30	5%3==0 x	5%2==0 x				
6<=30	6%3==0 L	6%2==0 L	✓	✓	6	6
7<=30	7%3==0 x	7%2==0 x				
8<=30	8%3==0 x	8%2==0 L				
9<=30	9%3==0 L	9%2==0 x		✓	9	
10<=30	10%3==0 x	10%2==0 L				
11<=30	11%3==0 x	11%2==0 x				
12<=30	12%3==0 L	12%2==0 L	✓	✓	12	12
13<=30	13%3==0 x	13%2==0 x				
14<=30	14%3==0 x	14%2==0 L				
15<=30	15%3==0 L	15%2==0 x		✓	15	
16<=30	16%3==0 x	16%2==0 L				
17<=30	17%3==0 x	17%2==0 x				
18<=30	18%3==0 L	18%2==0 L	✓	✓	18	18
19<=30	19%3==0 x	19%2==0 x				
20<=30	20%3==0 x	20%2==0 L				
21<=30	21%3==0 L	21%2==0 x				
22<=30	22%3==0 x	22%2==0 L		✓	21	

$23 < 30$

$23 \times 3 = 69 \times$

$23 \times 2 = 46 \times$

$24 < 30$

$24 \times 3 = 72 \checkmark$

$24 \times 2 = 48 \checkmark$

$\checkmark \quad \cancel{24} \quad 24 \quad 24$

$25 < 30$

$25 \times 3 = 75 \times$

$25 \times 2 = 50 \times$

$26 < 30$

$26 \times 3 = 78 \times$

$26 \times 2 = 52 \checkmark$

$27 < 30$

$27 \times 3 = 81 \checkmark$

$27 \times 2 = 54 \times$

$\checkmark \quad 27$

$28 < 30$

$28 \times 3 = 84 \times$

$28 \times 2 = 56 \checkmark$

$29 < 30$

$29 \times 3 = 87 \times$

$29 \times 2 = 58 \times$

$30 < 30$

$30 \times 3 = 90 \checkmark$

$30 \times 2 = 60 \checkmark$

$\checkmark \quad \checkmark \quad 30 \quad 30$