

## Find Smallest Even multiple

$$\begin{aligned} n \rightarrow 6 \div 2 = 0 \\ \&\& 2 \div 2 = 0 \end{aligned}$$

```
int n = sc.nextInt();  
int begin = 1;  
int end = begin;
```

```
while (true) {
```

```
    if (end % n == 0 && end % 2 == 0) {  
        break;
```

```
    } else {
```

```
        end++;
```

```
    }
```

```
}
```

```
return end;
```

$$\begin{aligned} \text{end} \rightarrow 10 \quad n \rightarrow 5 \\ (10 \% 5) == 0 \\ \text{end} \rightarrow 10 \quad \text{const} \\ (10 \% 2) == 0 \\ \text{end} \rightarrow 6 \quad n \rightarrow 6 \\ (6 \% 6) == 0 \\ \text{end} \rightarrow 6 \quad \text{const} \\ (6 \% 2) == 0 \end{aligned}$$



Problem Source