

```
public static int compute(int a, int b) {  
    int result = a * b;  
    for(int i = 1; i < a * b; i++){  
        if(i%a == 0 && i%b == 0){  
            result = i;  
            break;  
        }  
    }  
    return result;  
}
```

The diagram illustrates control flow with colored dots and lines:

- A purple dot is located on the line `int result = a * b;`.
- A purple dot is located on the line `for(int i = 1; i < a * b; i++){`.
- A grey dot is located on the line `if(i%a == 0 && i%b == 0){`.
- An orange dot is located on the line `return result;`.
- A yellow dot is located on the line `return result;`.

Lines connect the dots to show flow:

- A purple line connects the purple dot on `int result = a * b;` to the purple dot on `for(int i = 1; i < a * b; i++){`.
- A grey line connects the grey dot on `if(i%a == 0 && i%b == 0){` to the orange dot on `return result;`.
- An orange line connects the orange dot on `return result;` to the yellow dot on `return result;`.