

```
public static int compute(int value) {  
    if (value == 1) {  
        return 1;  
    }  
    return compute(value - 1) * value;  
}
```

The diagram illustrates the control flow of the provided Java code. Nodes, represented by colored circles, correspond to specific points in the code execution. The flow begins at the function entry (top left), proceeds to the `if (value == 1)` condition. If the condition is true, the flow goes to the `return 1;` statement. If false, it proceeds to the recursive call `compute(value - 1) * value;`. The recursive call branches back to the `if` condition, forming a loop. The flow ends at the function exit (bottom left).