# **Code Analysis Report**

File: ConstantTime.java

Language: Java

Analysis Date: 2025-10-03T12:22:26.702504Z

## **Quality Metrics**

| Metric          | Score  | Status |
|-----------------|--------|--------|
| Overall Quality | 72/100 | Medium |
| Code Coverage   | 22%    | Fail   |
| Complexity      | 0/100  | Low    |
| Quality Level   | Medium |        |

# **Bug Analysis**

| Detection Efficiency | 60%   |                              |
|----------------------|---|------------------------------|
| Total Bugs Found     | 0   |                              |
| Severity             | Medium  |                              |
| Categories           | performance_issues: 0, runtime_errors: 0, synta | x_errors: 0, logic_errors: 0 |

# **Time Complexity Analysis**

**Dominant Complexity:** O(1)

Confidence: 70%

## **Code Review**

public static voidSystem.out.println(getFirst(arr));int[] arr =  $\{10, 20, \{10, 20, 30\}$ ; public staticint[] arr =; // Always one stepO(1)  $\}$ 

### **Generated Tests**

```
public static voidSystem.out.println(getFirst(arr));int[] arr = \{10,\{10,20,30\}; int[]= \{20,30,; System . out\}public static int getFirst(int[]int[]= \{30,1,2,3,4,5,6,7,8,\} \}pub
```

### **Generated Documentation**

```
# API Documentation
## Class ConstantTime
- **Language**: Java
### getFirst
- **Parameters**: int[] arr
- **Returns**: Unknown
### main
- **Parameters**: String[] args
- **Returns**: Unknown
## Usage
# Compile and run
java ConstantTime
```

## **Corrected Code**

```
public class ConstantTime {
    public static void main(String[] args) {
        int a = 0;
        int b = 0;
        int sum = a + b;
        System.out.println("The sum of " + a + " + " + b + " is: " + sum);
    }
}
```