

# Code Coverage

Here I ignore all the class in the `java` & `gov` packages.

By running `./bin/jpf +classpath=src/examples/.`

`+listener=gov.nasa.jpf.CoverageListener Demo`, JPF will output the code coverage like the screenshot below

```
Demo.main()

===== search started: 9/24/19 1:20 AM

Hello world: 42!
Hello world: 42!
Hello world: 42!
Hello world: 42!

===== Coverage =====

----- SampleVariable.java -----
5  :   public SampleVariable(int a, double b) {
6  :       this.a = a;
7  :       this.b = b;
8  :   }

----- Demo.java -----
3  :       int a;
6  :       a = 19;
7  :       b = 23.3;
8  :       s = "prefect";
9  :       SampleVariable v = new SampleVariable(91, 89.1);
10 :       System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
11 :       System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
12 :       v.a = 92;
13 :       System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
14 :       v.a = 91;
15 :       System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
16 :   }

----- Add.java -----
3  :       return a + (int) b;
```

## Test Code

```
class Demo {
    public static void main(String argv[]) {
        int a;
        double b;
        String s;
        a = 19;
        b = 23.3;
        s = "prefect";
        SampleVariable v = new SampleVariable(91, 89.1);
```

```
        System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
        System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
        v.a = 92;
        System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
        v.a = 91;
        System.out.printf("Hello world: %d!\n", Add.add(a, b, s, v));
    }
}

class Add {
    public static int add(int a, double b, String s, SampleVariable v) {
        return a + (int) b;
    }
}

public class SampleVariable {
    public int a;
    double b;

    public SampleVariable(int a, double b) {
        this.a = a;
        this.b = b;
    }
}
```