**Input space partition**

**Each choice coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| -1 | 1 | 1 | 4 |
| 4 | 2 | 2 | 4 |
| 1 | 1 | 1 | 3 |
| 1 | 2 | 2 | 2 |
| 2 | 3 | 4 | 1 |

**Pair-wise coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| -1 | 1 | 1 | 4 |
| 4 | 2 | 2 | 4 |
| 1 | 1 | 1 | 3 |
| 1 | 2 | 2 | 2 |
| 2 | 3 | 4 | 1 |

**Graph coverage**

**Node coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 0 | 1 | 1 | 4 |
| 1 | 1 | 1 | 3 |
| 2 | 3 | 2 | 2 |
| 2 | 2 | 3 | 2 |
| 2 | 4 | 2 | 4 |
| 3 | 2 | 2 | 2 |
| 4 | 2 | 2 | 4 |
| 1 | 2 | 3 | 4 |
| 2 | 3 | 4 | 1 |
| 2 | 3 | 3 | 2 |

**edge coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 0 | 1 | 1 | 4 |
| 2 | 4 | 2 | 4 |
| 4 | 2 | 2 | 4 |
| 1 | 2 | 3 | 4 |
| 1 | 1 | 1 | 3 |
| 2 | 3 | 2 | 2 |
| 2 | 2 | 3 | 2 |
| 3 | 2 | 2 | 2 |
| 2 | 3 | 3 | 2 |
| 2 | 3 | 4 | 1 |

**prime path coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 0 | 1 | 1 | 4 |
| 2 | 4 | 2 | 4 |
| 4 | 2 | 2 | 4 |
| 1 | 2 | 3 | 4 |
| 1 | 1 | 1 | 3 |
| 2 | 3 | 2 | 2 |
| 2 | 2 | 3 | 2 |
| 3 | 2 | 2 | 2 |
| 2 | 3 | 3 | 2 |
| 2 | 3 | 4 | 1 |

**all-use coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 0 | 1 | 1 | 4 |
| 2 | 4 | 2 | 4 |
| 4 | 2 | 2 | 4 |
| 1 | 2 | 3 | 4 |
| 1 | 1 | 1 | 3 |
| 2 | 3 | 2 | 2 |
| 2 | 2 | 3 | 2 |
| 3 | 2 | 2 | 2 |
| 2 | 3 | 3 | 2 |
| 2 | 3 | 4 | 1 |

**Logic coverage**

**Predicate coverage**

**T F**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | EXPR |  | A | B | C | EXPR |
| 0 | 0 | 0 | 4 | 1 | 1 | 1 | 3 |
| 1 | 1 | 1 | 3 | 1 | 2 | 2 | 2 |
| 1 | 1 | 1 | 3 | 1 | 2 | 2 | 2 |
| 1 | 1 | 1 | 3 | 2 | 1 | 2 | 2 |
| 1 | 2 | 3 | 4 | 1 | 1 | 1 | 3 |
| 1 | 2 | 3 | 4 | 2 | 3 | 4 | 1 |
| 1 | 1 | 1 | 3 | 2 | 2 | 3 | 2 |
| 2 | 2 | 3 | 2 | 2 | 2 | 4 | 4 |
| 2 | 3 | 2 | 2 | 3 | 4 | 2 | 4 |
| 3 | 2 | 2 | 2 | 4 | 2 | 2 | 4 |

**clause coverage**

**T F**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| A | B | C | EXPR |  | A | B | C | EXPR |
| 0 | 1 | 1 | 4 | 1 | 1 | 1 | 3 |
| 1 | 0 | 1 | 4 | 1 | 1 | 1 | 3 |
| 1 | 1 | 0 | 4 | 1 | 1 | 1 | 3 |
| 2 | 3 | 6 | 4 | 2 | 3 | 4 | 1 |
| 6 | 2 | 3 | 4 | 2 | 3 | 4 | 1 |
| 2 | 6 | 3 | 4 | 2 | 3 | 4 | 1 |
| 2 | 2 | 3 | 2 | 2 | 3 | 2 | 2 |
| 2 | 2 | 3 | 2 | 2 | 2 | 5 | 4 |
| 2 | 3 | 2 | 2 | 3 | 2 | 2 | 2 |
| 2 | 3 | 2 | 2 | 2 | 5 | 2 | 4 |
| 1 | 2 | 2 | 2 | 1 | 2 | 1 | 4 |
| 3 | 2 | 2 | 2 | 5 | 2 | 2 | 4 |

**Correlated Active Clause Coverage**

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 0 | 1 | 1 | 4 |
| 1 | 1 | 1 | 3 |
| 1 | 0 | 1 | 4 |
| 1 | 1 | 0 | 4 |
| 2 | 3 | 6 | 4 |
| 2 | 3 | 4 | 1 |
| 6 | 2 | 3 | 4 |
| 2 | 6 | 3 | 4 |
| 2 | 2 | 3 | 2 |
| 2 | 3 | 3 | 2 |
| 2 | 2 | 5 | 4 |
| 2 | 3 | 3 | 2 |
| 2 | 3 | 3 | 2 |
| 2 | 5 | 2 | 4 |
| 3 | 2 | 2 | 2 |
| 1 | 2 | 2 | 4 |
| 5 | 2 | 2 | 4 |

**mutation testing**

**TritypMutantOne**

Kill the mutant：

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 2 | 2 | 4 | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 2 | 2 | 4 | 2 |

**TritypMutantTwo**

Kill the mutant：

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 2 | 2 | 4 | 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| A | B | C | EXPR |
| 2 | 2 | 4 | 2 |