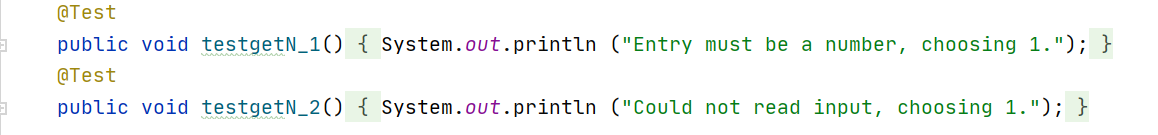
一、Input space partition

|  |  |  |  |
| --- | --- | --- | --- |
| 编号 | 测试用例 | 期望输出 | 结果 |
| T1 | -1 1 1 | -1 | 输入不符合 |
| T2 | 3 1 1 | 0 | 不是三角形 |
| T3 | 1 1 1 | 3 | 等边三角形 |
| T4 | 1 2 2 | 2 | 等腰三角形 |
| T5 | 2 3 4 | 1 | 普通三角形 |

二、Graph coverage

①node coverage



②edge coverage

|  |  |  |  |
| --- | --- | --- | --- |
| 编号 | 测试用例 | 期望输出 | 结果 |
| T1 | 2 1 1 | 0 | 不是三角形 |

③prime path coverage

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 编号 | 测试用例 | 输出 | 结果 | 覆盖路径 |
| T1 | -1 1 1 | -1 | 输入不符合 | S0 –> J1\_Y –> S1 |
| T2 | 1 -1 1 | -1 | 输入不符合 | S0 –> J1\_NY –> S1 |
| T3 | 1 1 -1 | -1 | 输入不符合 | S0 –> J1\_NNY –> S1 |
| T4 | 100 1 1 | -1 | 输入不符合 | S0 –> J1\_NNN –> J2\_Y –> S1 |
| T5 | 1 100 1 | -1 | 输入不符合 | S0 –> J1\_NNN –> J2\_NY –> S1 |
| T6 | 1 1 100 | -1 | 输入不符合 | S0 –> J1\_NNN –> J2\_NNY –> S1 |
| T7 | 1 1 3 | 0 | 不是三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3\_Y –> S2 |
| T8 | 1 3 1 | 0 | 不是三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3\_NY –> S2 |
| T9 | 3 1 1 | 0 | 不是三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3\_NNY –> S2 |
| T10 | 1 1 1 | 3 | 等边三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3\_NNN –> J4\_YY –> S3 |
| T11 | 1 2 2 | 2 | 等腰三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3 –> J4\_YN –> S4 |
| T12 | 2 1 1 | 2 | 等腰三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3 –> J4\_NN –> J5\_NNY –> S4 |
| T13 | 2 1 2 | 2 | 等腰三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3 –> J4\_NY –> J5\_NY –> S4 |
| T14 | 2 3 4 | 1 | 普通三角形 | S0 –> J1\_NNN –> J2\_NNN –> J3 –> J4\_NN –> J5\_NNN –> S4 |

三、Logic coverage

①predicate coverage

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 编号 | 测试用例 | 输出 | J1 | J2 | J3 | J4 | J5 |
| T1 | 1 1 -1 | -1 | Y |  |  |  |  |
| T2 | 1 1 100 | -1 | N | Y |  |  |  |
| T3 | 1 1 2 | 0 | N | N | N |  |  |
| T4 | 1 1 1 | 3 | N | N | Y | Y |  |
| T5 | 2 1 2 | 2 | N | N | Y | N | Y |
| T6 | 2 3 4 | 1 | N | N | Y | N | N |

②clause coverage

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 编号 | 测试用例 | 输出 | J1分支 | J2分支 | J3分支 | J4分支 | J5分支 |
| T1 | 1 1 -1 | -1 | TTT |  |  |  |  |
| T2 | 1 1 100 | -1 | FFF | TTT |  |  |  |
| T3 | 1 1 3 | 0 | FFF | FFF | FTT |  |  |
| T4 | 1 3 1 | 0 | FFF | FFF | TFT |  |  |
| T5 | 3 1 1 | 0 | FFF | FFF | TTF |  |  |
| T6 | 1 1 1 | 3 | FFF | FFF | TTT | TTT | TTT |
| T7 | 2 3 4 | 1 | FFF | FFF | TTT | FFF | FFF |

③correlated active clause coverage

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 编号 | 测试用例 | 输出 | J1分支 | J2分支 | J3分支 | J4分支 | J5分支 | 判定 |
| T1 | 1 1 -1 | -1 | TTT |  |  |  |  | Y#### |
| T2 | 1 1 100 | -1 | FFF | TTT |  |  |  | NY### |
| T3 | 1 1 3 | 0 | FFF | FFF | FTT |  |  | NNN## |
| T4 | 1 3 1 | 0 | FFF | FFF | TFT |  |  | NNN## |
| T5 | 3 1 1 | 0 | FFF | FFF | TTF |  |  | NNN## |
| T6 | 1 1 1 | 3 | FFF | FFF | TTT | TTT | TTT | NNYYY |
| T7 | 2 3 4 | 1 | FFF | FFF | TTT | FFF | FFF | NNYNN |

四、mutation testing

①TritypMutantOne

|  |  |  |  |
| --- | --- | --- | --- |
| 编号 | 测试用例 | 期望输出 | 结果 |
| T1 | 1 1 2 | 0 | 不是三角形 |
| T2 | 2 2 5 | 0 | 不是三角形 |

②TritypMutantTwo

|  |  |  |  |
| --- | --- | --- | --- |
| 编号 | 测试用例 | 期望输出 | 结果 |
| T1 | 1 1 2 | 0 | 不是三角形 |
| T2 | 2 2 4 | 0 | 不是三角形 |