

Side note on A3

What is an Infeasible Path in Software Testing?

Infeasible Path in software testing context can be defined as the path that cannot be verified by any set of possible input values and most expensive activities of software testing.

It is a white box testing technique identified by drawing the flowgraph of the developed code and finding out the path that would never be reached with any type of the data.

Source: https://www.tutorialspoint.com/software_testing_dictionary/infeasible_path.htm

Infeasible paths

- Set of paths:

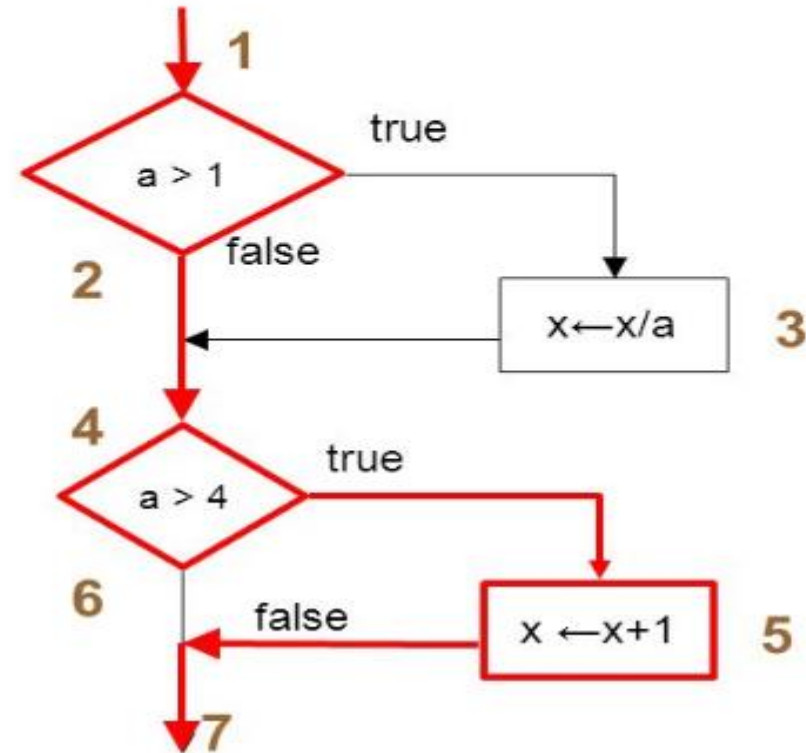
1 - 2 - 4 - 6 - 7

1 - 3 - 4 - 6 - 7

1 - 2 - 4 - 5 - 7

1 - 3 - 4 - 5 - 7

- To be able to take this path, we would have to have $a \leq 1$ AND $a > 4$ - which is logically impossible!



Infeasible path (Cont)

- a. **Edge Coverage:** Our final coverage as shown above is 90.5% coverage. We expected to reach 100% coverage but couldn't due to issues in the program. As shown in our CFG, the edge between the node 21 and 34 is infeasible because it would need a test case where the month does not end in 31 or 30, and is neither February nor December, which is an impossible test case. In addition, the node

Source: Team Teresa Lovely Jose (TLJ)'s A3

issues with regard to the number of days in December. This can be seen in the above tables. In the isFeb method we were not able to reach 100% coverage unless there was an input of July involved. We believe this was done intentionally by the professor to try and teach us the importance of using the EcEmma tool.

Source: Team Amrit & Talal 's A3