

Algorithm 2:

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initial_test_data := randomly generate a test data from the input domain;
selected_set := { initial_test_data };
counter := 1;
total_number_of_candidates := 10;
use initial_test_data to test the program;
if (program output is incorrect) then
    reveal_failure := true;
else
    reveal_failure := false;
end_if
while (not reveal_failure) do
    candidate_set := {};
    test_data := Select_The_Best_Test_Data(selected_set, candidate_set,
                                          total_number_of_candidates);
    use test_data to test the program;
    if (program output is incorrect) then
        reveal_failure := true;
    else
        selected_set := selected_set + { test_data };
        counter := counter + 1;
    end_if
end_while
output counter;

```

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Algorithm /2