

Q2.

When the mujava tool was used to mutate the implementation of the roman program, total 480 mutants were generated. All of the generated mutants were traditional mutants, and none of the generated mutants were class mutants.

The number of different types of traditional mutants that were generated were the following:

AORB	52
AORS	0
AOIU	2
AOIS	68
AODU	0
AODS	0
ROR	112
COR	2
COD	0
COI	19
SOR	0
LOR	0
LOI	18
LOD	0
ASRS	52
SDL	101
VDL	0
CDL	13
ODL	41

The results were the following for traditional mutants:

Live Mutants #	57
Killed Mutants #	423
Total Mutants #	480
Mutant Score	88.0%