Input conditions	Valid sub domains	Invalid subdomains
last name – array size	(1) 1-20 characters	(2) <1 characters, (3) >20 char
Age	(4) 18-23, (5) 24-120	(6) <18, (7) >120
Car type	(8) Sedan, (9) mini-van, (10) truck, (11) SUV	(12) Anything else
Car age	(13)1-9 (14)10-120	(15)<1(16)>120
# of claims	(17) 0, (18) 1,(19) 2-4,(20) 5-12	(21) >12

Related input conditions:

- age, # of claims, car age

Q.1 :

Tests:

Strong Normal Equivalence tests:

T1: last name= tom, age=20, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (1, 4, 11, 13, 19)

T2: last name= tom, age=20, car type: Sedan, car age=5, # of claims= 0 Sub-domains covered: (4, 8, 13, 17)

T3: last name= tom, age=20 , car type: mini-van, car age=5, # of claims= 1 Sub-domains covered: (4, 9, 13, 18)

T4: last name= tom, age=20 , car type: truck, car age=5, # of claims= 8 Sub-domains covered: (4, 10, 13 20)

T5: last name= tom, age=37 , car type: SUV, car age=5, # of claims= 0 Sub-domains covered: (5, , 13, 17)

T6: last name= tom, age=37 , car type: SUV, car age=5, # of claims= 1 Sub-domains covered: (5, 13 18)

T7: last name= tom, age=37, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (5, 13, 19)

T8: last name= tom, age=37 , car type: SUV, car age=5, # of claims= 8 Sub-domains covered: (5, 13, 20)

T9: last name= tom, age=20, car type: SUV, car age=50, # of claims= 3 Sub-domains covered: (4, 14, 19)

T10: last name= tom, age=20, car type: Sedan, car age=50, # of claims= 0 Sub-domains covered: (4, 14, 17)

T11: last name= tom, age=20 , car type: mini-van, car age=50, # of claims= 1 Sub-domains covered: (4, 9, 18)

T12: last name= tom, age=20 , car type: truck, car age=50, # of claims= 8 Sub-domains covered: (4, 14, 20)

T13: last name= tom, age=37 , car type: SUV, car age=50, # of claims= 0 Sub-domains covered: (5, 14, 17)

T14: last name= tom, age=37 , car type: SUV, car age=50, # of claims= 1 Sub-domains covered: (5, 14, 18)

T15: last name= tom, age=37, car type: SUV, car age=50, # of claims= 3 Sub-domains covered: (5, 14, 19)
T16: last name= tom, age=37 , car type: SUV, car age=50, # of claims= 8 Sub-domains covered: (5, 14, 20)

Weak Robust Equivalence tests:
T1: last name: NULL, age=37, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (2)
T2: last name= abcdefghijlkmnopqrstu, age=37, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (3)
T3: last name=tom, age=16, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (6)
T4: last name=tom, age=128, car type: SUV, car age=5, # of claims= 3 Sub-domains covered: (7)
T5: last name=tom, age= 19,car type: bike, car age=5, # of claims= 3 Sub-domains covered: (12)
T6: last name=tom, age= 19, car type: SUV, car age=0, # of claims= 3 Sub-domains covered: (15)
T7: last name=tom, age= 19, car type: SUV, car age=125, # of claims= 3 Sub-domains covered: (16)
T8: last name=tom, age= 19, car type= SUV, car age=5, # of claims= 15, Sub-domains covered: (21)

Q.2:

Boundary-Value Analysis tests:

T1: last name= t, age=18, car type: SUV, car age=5, # of claims= 3
T2: last name= to, age=18, car type: SUV, car age=5, # of claims= 3
T3: last name= abcdefghijklmnopqrst, age=18, car type: SUV, car age=5, # of claims= 3
T4: last name= abcdefghijkmnopqrs, age=18, car type: SUV, car age=5, # of claims= 3
T5: last name= tom, age=18, car type: SUV, car age=5, # of claims= 3
T6: last name= tom, age=19, car type: SUV, car age=5, # of claims= 3
T7: last name= tom, age=23, car type: SUV, car age=5, # of claims= 3
T8: last name= tom, age=22, car type: SUV, car age=5, # of claims= 3
T9: last name= tom, age=24, car type: SUV, car age=5, # of claims= 3
T10: last name= tom, age=25, car type: SUV, car age=5, # of claims= 3
T11: last name= tom, age=120, car type: SUV, car age=5, # of claims= 3
T12: last name= tom, age=119, car type: SUV, car age=5, # of claims= 3
T13: last name= tom, age=18, car type: SUV, car age=1, # of claims= 3
T14: last name= tom, age=18, car type: SUV, car age=2, # of claims= 3
T15: last name= tom, age=18, car type: SUV, car age=9, # of claims= 3
T16: last name= tom, age=18, car type: SUV, car age=10, # of claims= 3
T17: last name= tom, age=18, car type: SUV, car age=11, # of claims= 3
T18: last name= tom, age=18, car type: SUV, car age=120, # of claims= 3
T19: last name= tom, age=18, car type: SUV, car age=119, # of claims= 3
T20: last name= tom, age=18, car type: SUV, car age=5, # of claims= 0
T21: last name= tom, age=18, car type: SUV, car age=5, # of claims= 1
T22: last name= tom, age=18, car type: SUV, car age=5, # of claims= 2
T23: last name= tom, age=18, car type: SUV, car age=5, # of claims= 4
T24: last name= tom, age=18, car type: SUV, car age=5, # of claims= 5
T25: last name= tom, age=18, car type: SUV, car age=5, # of claims= 6
T26: last name= tom, age=18, car type: SUV, car age=5, # of claims= 12
T27: last name= tom, age=18, car type: SUV, car age=5, # of claims= 11

Robustness Tests:

T1: last name= NULL, age=18, car type: SUV, car age=5, # of claims= 3
T2: last name= abcdefghijklmnopqrstu , age=18, car type: SUV, car age=5, # of claims= 3
T3: last name= tom, age=15, car type: SUV, car age=5, # of claims= 3
T4: last name= tom, age=130, car type: SUV, car age=5, # of claims= 3
T5: last name= tom, age=22, car type: SUV, car age=0, # of claims= 3
T6: last name= tom, age=22, car type: SUV, car age=125, # of claims= 3
T7: last name= tom, age=22, car type: SUV, car age=5, # of claims= -1
T8: last name= tom, age=22, car type: SUV, car age=5, # of claims= 13