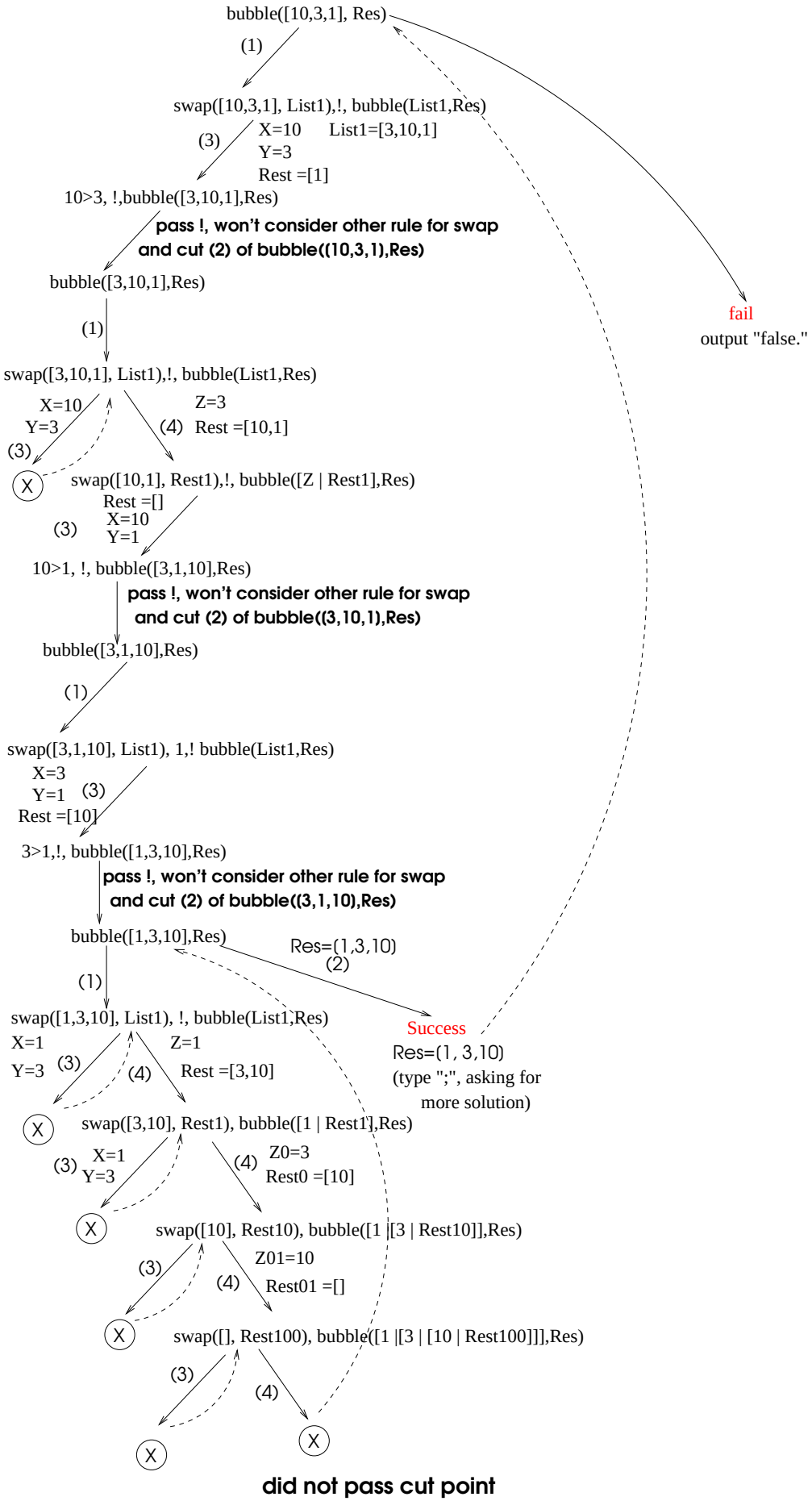
Example 4


bubble([10,3,1], Res)
(1)
swap([10,3,1], List1),!, bubble(List1,Res)
(3)
X=10 List1=[3,10,1]
Y=3
Rest =[1]
10>3, !,bubble([3,10,1],Res)
pass !, won't consider other rule for swap
and cut (2) of bubble((10,3,1),Res)
bubble([3,10,1],Res)
(1)
swap([3,10,1], List1),!, bubble(List1,Res)
X=10
Y=3
(3)
Z=3
(4) Rest =[10,1]
X
swap([10,1], Rest1),!, bubble([Z | Rest1],Res)
Rest =[]
(3) X=10
Y=1
10>1, !, bubble([3,1,10],Res)
pass !, won't consider other rule for swap
and cut (2) of bubble((3,10,1),Res)
bubble([3,1,10],Res)
(1)
swap([3,1,10], List1), 1,! bubble(List1,Res)
X=3
Y=1 (3)
Rest =[10]
3>1,!, bubble([1,3,10],Res)
pass !, won't consider other rule for swap
and cut (2) of bubble((3,1,10),Res)
bubble([1,3,10],Res)
Res=(1,3,10)
(2)
(1)
swap([1,3,10], List1), !, bubble(List1,Res)
X=1
Y=3 (3)
Z=1
(4) Rest =[3,10]
X
swap([3,10], Rest1), bubble([1 | Rest1],Res)
(3) X=1
Y=3
(4) Z0=3
Rest0 =[10]
X
swap([10], Rest10), bubble([1 |[3 | Rest10]],Res)
(3)
Z01=10
(4)
Rest01 =[]
X
swap([], Rest100), bubble([1 |[3 | [10 | Rest100]]],Res)
(3)
(4)
X
X
fail
output "false."
Success
Res=(1, 3,10)
(type ";", asking for
more solution)
did not pass cut point