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In [9]: #Ayush Sharma 209303312
#Python code to solve some algebraic relations using constraintsatisfaction
#solving constraint  $x+y \geq 15$  when  $x$  can be from [1,2,3,4,5] and  $y$  can be from [1,2,

from constraint import *

problem=Problem()
problem.addVariable("x",[1,2,3,4,5,6,7])
problem.addVariable("y",[1,2,3,4,5,6,7,8,9,10,11,12])

def my_constraint(x,y):
    if x+y>15:
        return True

problem.addConstraint(my_constraint,['x','y'])
s=problem.getSolutions()
for i in s:
    print(i)

{'x': 7, 'y': 12}
{'x': 7, 'y': 11}
{'x': 7, 'y': 10}
{'x': 7, 'y': 9}
{'x': 6, 'y': 12}
{'x': 6, 'y': 11}
{'x': 6, 'y': 10}
{'x': 5, 'y': 12}
{'x': 5, 'y': 11}
{'x': 4, 'y': 12}
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In [ ]:
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