# Compulsary 2

## Problem 2

### a)

A(1) = {(0,0), (3,5)}

A(2) = {(0,0), (3,5), (2,3), (5,8)}

A(3) = {(0,0), (3,5), (2,3), (5,8), ~~(2,2)~~, ~~(5,7)~~, ~~(4,5)~~, (7,10)}

A(3) = {(0,0), (3,5), (2,3), (5,8), (7,10)}

A(4) = {(0,0), (3,5), (2,3), (5,8), (7,10), ~~(4, 5)~~, ~~(7, 10)~~, ~~(6, 8)~~, (9, 13)}

A(4) = {(0,0), (3,5), (2,3), (5,8), (7,10), (9, 13)}

A(5) = {(0,0), (3,5), (2,3), (5,8), (7,10), (9, 13), ~~(3, 4)~~, (6, 9), ~~(5, 7)~~, (8, 12), (10, 14)}

A(5) = {(0,0), (3,5), (2,3), (5,8), (7,10), (9, 13), (6, 9), (8, 12), (10, 14)}

A(6) = {(0,0), (3,5), (2,3), (5,8), ~~(7,10)~~, ~~(9, 13)~~, ~~(6, 9)~~, (8, 12), ~~(10, 14)~~, (1, 2), (4, 7), ~~(3, 5)~~, (6, 10), ~~(8, 12)~~, (10, 15), (7, 11), (9, 14)}

A(6) = {(0,0), (3,5), (2,3), (5,8), (8, 12), (1, 2), (4, 7), (6, 10), (10, 15), (7, 11), (9, 14)}

### b)

The maximum number of elements would be B+1, if there would be more there would be sets worth less that has not been removed.

### c)

The maximum of elements in this case would usually be

$v_{max} + v_{max-1}$

## Problem 4

NB: This is preemptive and the task is preemptive Job 4 + Job 3 + Job 6 + Job 2 + Job 5 + Job 1 + Job 7 = 3 + 5 + 7 + 11 + 15 + 21 + 23 = 85

Job 2 + Job 4 + Job 6 + Job 3 + Job 5 + Job 1 + Job 7 = 5 + 6 + 8 + 11 + 15 + 21 + 23 = 89