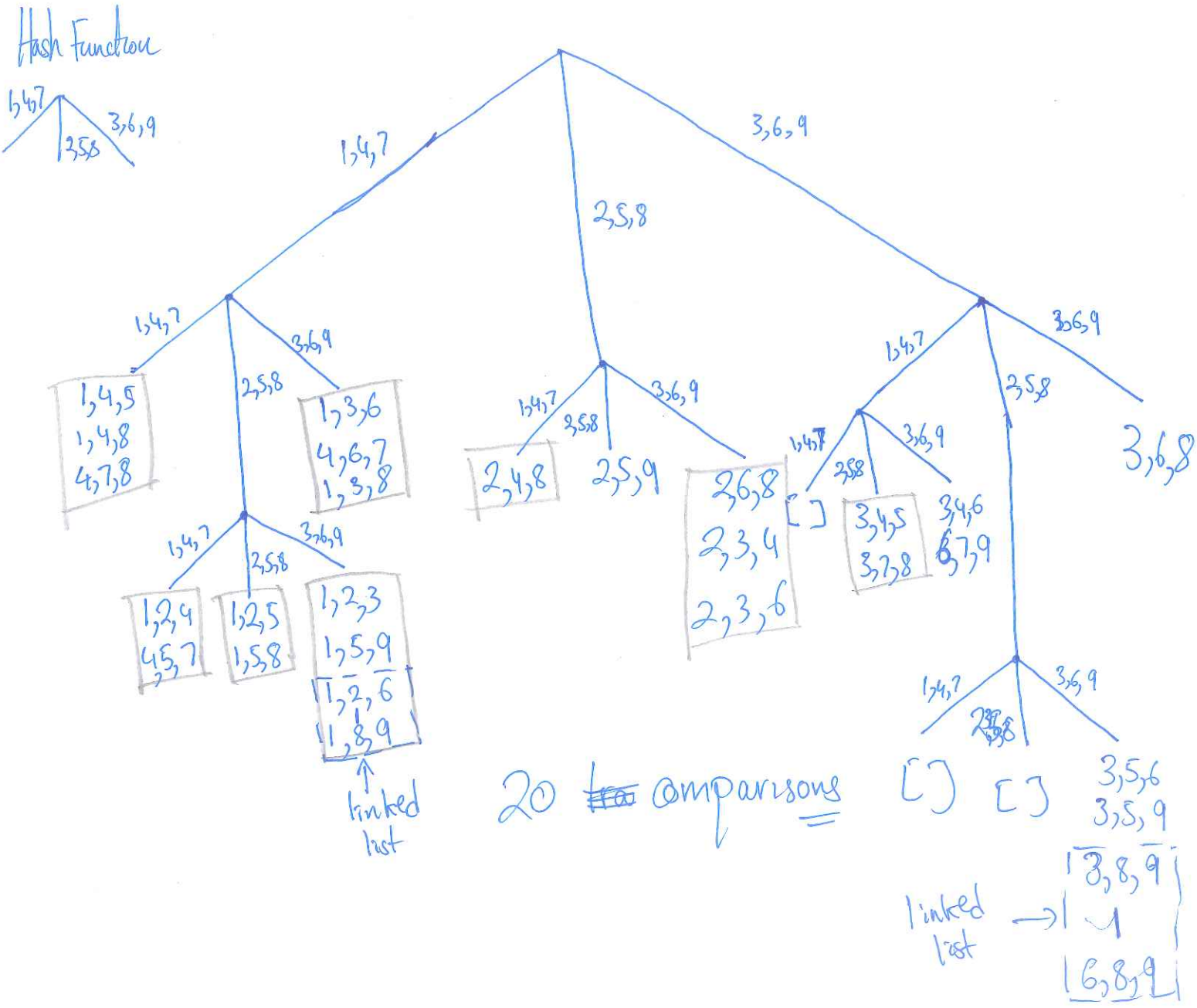
Assignment 1

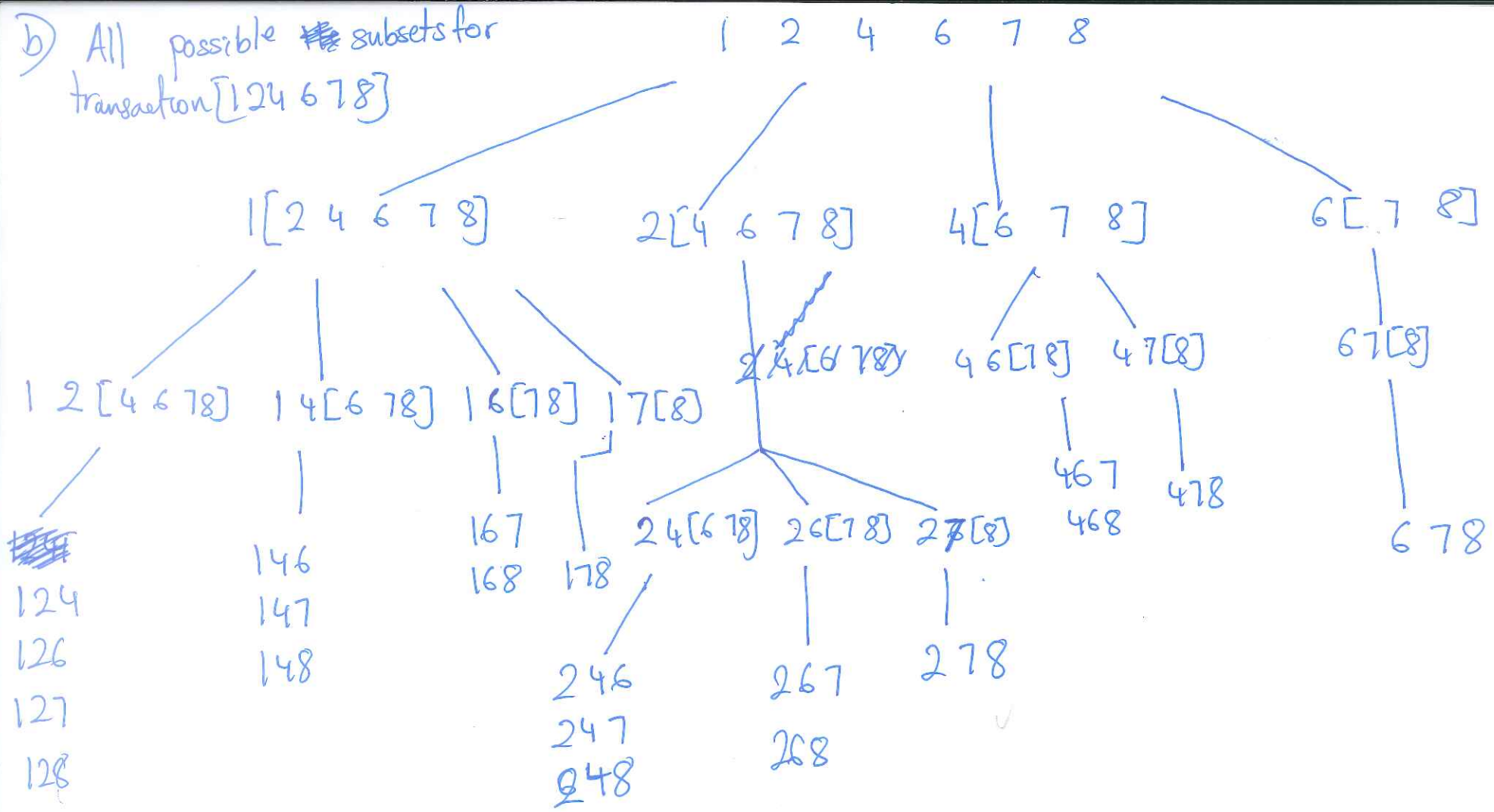
Q1

b) After sorting and deleting duplicates, there are 28 candidates

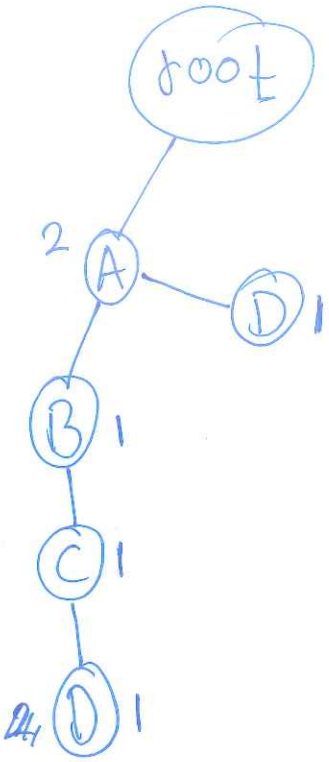
candidate_set = {1,2,3}, {1,4,5}, {1,2,4}, {1,2,5}, {1,5,9}, {1,3,6}, {1,4,8}
{1,2,6}, {1,8,9}, {1,5,8}, {1,3,8}
{2,3,4}, {2,5,9}, {2,3,6}, {2,4,8}, {2,6,8}
{3,4,5}, {3,5,6}, {3,8,9}, {3,5,9}, {3,4,6}, {3,5,8}, {3,7,8}
{4,5,7}, {4,7,8}, {4,6,7},
{6,8,9}, {6,7,9}



b) All possible subsets for transaction [1 2 4 6 7 8]



2b)



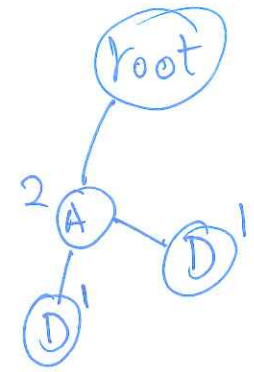
Support threshold = 2

sup(A)=2 sup(C)=1

sup(B)=1 sup(D)=2

As sup(B) < minsup and sup(C) < minsup

the resulting conditional fp tree for D is:



~~{(A:1)}~~

result:

{(A:1, D:1), (A:1, D:1)}