Problem Set 8

Exercise 3

Pass - 1 : $k = 1$

C_1 :

Item set	sup_count
1	100
2	50
3	33
4	25
5	20
6	16
7	14
8	12
9	11
10	10
11	9
12	8
13	7
14	7
15	6
16	6
17 - 20	5
21 - 25	4
26 - 33	3
34 - 50	2
51 - 100	1

L_1:

Itemset	sup_count
1	100
2	50
3	33
4	25
5	20
6	16
7	14
8	12
9	11
10	10
11	9
12	8
13	7
14	7
15	6
16	6
17 - 20	5

Pass - 2 : $k = 2$

C_2: Every item from $L1$ with every item from $L1$, excluding pairs with it self.

L_2:

Itemset		Sup-count	
$\{1, y\}$	$y \in [2,20]$	Count of y	For Example: $\{1, 20\} \rightarrow 5$
$\{2, y\}$	with $y = 2,6,8,10,12,14,16,18,20$	Count of y	For Example: $\{2, 10\} \rightarrow 10$
$\{3, y\}$	with $y = 6,9,12,15,18$	Count of y	For Example: $\{3, 9\} \rightarrow 11$
$\{4, y\}$	with $y = 8,12,16,20$	Count of y	For Example: $\{4, 16\} \rightarrow 6$
$\{5, y\}$	with $y = 5,15,20$	Count of y	For Example: $\{5, 15\} \rightarrow 6$
$\{6,12\}$		8	
$\{7,14\}$		7	
$\{8,16\}$		6	
$\{9,18\}$		5	
$\{10,20\}$		5	
$\{2,3\}$		16	
$\{2,5\}$		10	
$\{2,7\}$		7	
$\{2,9\}$		5	
$\{3,5\}$		6	
$\{4,5\}$		5	

Pass - 3 : $k = 3$

C_3 :

- excluding triples with it self.

L_3 :

Item set	sup_count
{1, 10, 20}	5
{2 10 20}	5
{4 10 20}	5
{5 10 20}	5
1 9 18	5
3 9 18	5
6 9 18	5
1 8 16	6
2 8 16	6
4 8 16	6
8 9 16	6
⋮	⋮