

# CSC148 Worksheet 7 Solution

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## Question 1

- Noticed that there are 11 students in total.
- Students should be grouped by year as closest as possible.

Notes:

- 형모 해낼 뚝 있쥬!
- 형모 화이팅!

## Question 2

Name	Year	College	
Priya	3	Victoria	Group 1
Alain	2	New	
Zoe	3	Woodsworth	
Francesco	3	Victoria	
Mohammed	4	Woodsworth	Group 2
Xiaoyuan	5	New	
Rohit	2	New	
Yimin	3	Trinity	
Grace	5	Woodsworth	Group 3
Claire	1	Woodsworth	
Kai	1	Woodsworth	

## Question 3

- First, we need to find the group as homogenous as possible in terms of year students are in.

The definition tells us group needs to be in 4, and the following table tell us there are 4  $3^{rd}$  year students.

Student Year	Number of Students
1	2
2	2
3	4
4	1
5	2

It follows from these facts that the group of  $3^{rd}$  year students best satisfy this criterion.

Next, we need to find the group as not homogenous as possible in terms of year students are in.

The same table tells us with 2  $5^{th}$  year students, 1  $4^{th}$  year students and 1  $3^{rd}$  year student, a group spanning 3 years can be created.

Since we know there can't be a group spanning 4 years, we can conclude the group of 3 years (2  $5^{th}$  year students, 1  $4^{th}$  year students and 1  $3^{rd}$  year student) best satisfy this criterion.

**Question 4**

**Question 5**

**Question 6**

**Question 7**

**Question 8**

**Question 9**

**Question 10**