1. Given the dataset below. You can give any meaning to the numbers in the table. Nonetheless, our focus is to compare ANOVA with the regression with dummy variables. First, import the table into R as a data frame manually, after which you can use *aov()* to run ANOVA and *lm()* to run regression. Please try to figure out how to assign dummy coding/variables to different groups, and check the similarity between the results from two methods.

	Group 1	Group 2	Group 3
	3	10	7
	2	9	6
	1	9	7
	1	8	6
	4	7	5
	2	8	4
	4	6	3
	3	7	6
Mean	2.5	8	5.5

Figure 1: Data for question 2

2. Recall the example we mentioned in last lecture. We have *salary* as the criterion variable (Y) in our model, and use 2 dummy variables X_1, X_2 to code 3 levels of *job titles*. Additionally, we have *years of work* as a continuous predictor. Finally, assume we have the model below:

$$y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 year + \beta_4 X_1 year + \beta_5 X_2 year + \epsilon \tag{1}$$

Try to interpret all βs above in the model by making use of the knowledge you learned in the lecture.