

Homework 8:

1. The following table refers to effects of occupations (A, B, C, D, E) and education level (P, S, C) on whether one follows politics regularly.

Follow Politics Regularly	A		B		C		D		E	
	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No
P	94	84	227	112	356	144	166	526	447	430
S	318	120	371	71	256	76	142	103	78	25
C	473	72	180	8	22	2	47	7	22	2

Analyze these data using logistic regression models.

2. The following table shows a set of data on reported occurrences of a communicable disease in two areas of the country at ten 2 month intervals, 2, 4, ..., 20.

Area A	Area B	Month
8	14	2
8	19	4
10	16	6
11	21	8
14	23	10
17	27	12
13	28	14
15	29	16
17	33	18
15	31	20

Please analyze the data using log-linear models by assuming that the occurrences are Poisson variables. Please make conclusions.

3. Please write a Java program to have 2 methods:

1. One method with input N and output $N!$.
2. The other method with 2 input real numbers and print out which one of the 3 intervals, $(-\infty, -1)$, $[-1, 1]$, $(1, \infty)$, the sum of the 2 real numbers falls in.