

Assignment 5

1. Run program lsq.f90. This program with related data sets can be found in directory listed on board. Modify the program so that it can read a parameter file containing: name of data file, number of effects and number of levels. The parameter file could contain the following:

```
data_pr1      !name of the data file
2             !number of effects
2 3           !number of levels for each trait
```

2. Apply the modified program to:

- a) the original data
- b) the data as below

<u>management</u>	<u>animal</u>	<u>treatment</u>	<u>record</u>
1	1	1	
	12		
1	2	2	
	14		
1	3	1	
	13		
2	3	1	
	16		
2	2	2	
	18		
3	4	1	
	15		
3	3	2	
	16		
3	2	2	
	19		

Optional

3. Think how the parameter file can be simplified so that the number of effects is not give, i.e., the above parameter file simplifies to:

```
data_pr1      !name of the data file
2 3           !number of levels for each trait; defines the number of traits
```

hint: when the reading is unsuccessful, for example because of too few numbers, the variable associated with iostat becomes $\neq 0$.