1. A manufacture suspects that the batches of raw material furnished by his supplier differ significantly in calcium content. There are a large number of batches currently in the warehouse. Five of these are randomly selected for study. A chemist makes five determinations on each batch and obtains the following data.

Batches	<u>Observations</u>				
1	23.46	23.48	23.56	23.39	23.40
2	23.59	23.46	23.42	23.49	23.50
3	23.51	23.64	23.46	23.52	23.49
4	23.28	23.40	23.37	23.46	23.39
5	23.29	23.46	23.37	23.32	23.38

SAS Output

		Sum of		
Source	DI	Square	s Mean Square	F Value
Model	4	0.09697600	0.02424400	5.54
Error	20	0.0876000	0.00438000)
Corrected Total	24	0.1845760	0	
Source	DF	Type I SS	Mean Square	F Value
batc	4	0.09697600	0.02424400	5.54