

(ch2-cholest\_HO.out) cholest.sas

OPTIONS LS=80 PS=66 PAGENO=1 NOCENTER NODATE;

```

DATA design;
  INPUT treatment @@;      * @@ tells SAS to read more than 1 obs per line;
  random_no = RANUNI(0);    * (Seed=0) --> use time of day;
  DATALINES;
  1 1 1 1 1 1 1 1 1 1 1 1
  2 2 2 2 2 2 2 2 2 2 2 2
  ;
RUN;

PROC SORT DATA=design;
  BY random_no;

PROC PRINT;
  RUN;

```

The SAS System

Obs	treatment	random_no
1	2	0.04456
2	1	0.16785
3	1	0.18329
4	2	0.19447
5	2	0.25224
6	2	0.28159
7	1	0.32069
8	1	0.34371
9	1	0.40165
10	1	0.43397
11	2	0.43603
12	1	0.45013
13	2	0.56952
14	2	0.60139
15	1	0.64693
16	1	0.64978
17	1	0.65921
18	1	0.66917
19	2	0.66955
20	1	0.67706
21	2	0.74813
22	2	0.83185
23	1	0.83805
24	2	0.83920
25	2	0.83953
26	2	0.84075
27	2	0.85231
28	1	0.88534
29	2	0.89241
30	1	0.95004

OPTIONS LS=80 PS=66 PAGENO=1 NOCENTER NODATE;

```

*Define the location of the input data file, called "file1";
FILENAME file1 URL "http://www.uvm.edu/~rsingle/stat231/data/other/cholest.dat";

DATA cholest;
  INFILE file1 FIRSTOBS=2 EXPANDTABS;
  INPUT diet $ decrease;
  RUN;

*PROC PRINT Data = cholest;

PROC TTEST Data = cholest CI=NONE;
  CLASS diet;
  RUN;

PROC GLM Data = cholest;
  CLASS diet;
  MODEL decrease = diet;
  RUN;
  QUIT;

```

TTEST PROCEDURE

Variable: DECREASE

DIET	N	Mean	Std Dev	Std Error
bean	15	26.86000000	6.81194329	1.75883620
oat	15	32.23333333	8.06718810	2.08293901

	T	DF	Prob> T
Unequal	-1.9710	27.2	0.0590
Equal	-1.9710	28.0	0.0587

For H0: Variances are equal, F' = 1.40 DF = (14,14) Prob>F' = 0.5351

General Linear Models Procedure

Class	Levels	Values
DIET	2	bean oat

Number of observations in data set = 30

Dependent Variable: DECREASE

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	1	216.545333	216.545333	3.88	0.0587
Error	28	1560.749333	55.741048		
Corrected Total	29	1777.294667			

	R-Square	C.V.	Root MSE	DECREASE Mean
	0.121840	25.26848	7.46599	29.5467

Source	DF	Type I SS	Mean Square	F Value	Pr > F
DIET	1	216.545333	216.545333	3.88	0.0587

Source	DF	Type III SS	Mean Square	F Value	Pr > F
DIET	1	216.545333	216.545333	3.88	0.0587