MET MA 603:

SAS Programming and Applications

Proc Transpose

Transposing Datasets

SAS datasets are organized into variables (columns) and observations (rows). Sometimes we need to change the organization of our data. Transposing a dataset means to change observations in a row into observations in a column, or to convert variables into observation and observations into variables.

A	B	C
1	2	3
4	5	6
7	8	9

→

A	1	4	7
B	2	5	8
C	3	6	9

The Transpose Procedure

The **Transpose Procedure** transforms an input dataset.

In the BY statement, list any grouping variables that should remain variables in the transposed dataset. The dataset must be sorted according to the variables listed.

In the ID statement, list a variable whose observations will become the new variable names in the transposed dataset.

In the VAR statement, list the variables whose observations will be transposed. Note: unless listed in the VAR statement, character data types are not transposed.

```
Proc Transpose data=test_data out=test_data_transposed ;
by          variables-list ;
var         variables-list ;
id          variable ;
run ;
```

Practice

Use the Height_and_Weight_Survey.sas7bdat dataset.

Use Proc Transpose to organize the data as shown below (*not all observations are shown*):

VIEWTABLE: Work.Hw_data_transpose

	Subject	Age	Height	Weight
1	1	21	186	85
2	2	31	176	61
3	3	26	193	85
4	4	21	185	80
5	5	20	169	92
6	6	19	177	75
7	7	19	179	99
8	8	20	176	68
9	9	19	176	106
10	10	18	178	95
11	11	21	188	104
12	12	19	180	94

Readings

- Textbook section 6.14