

SAS1 Introduction to SAS

SAS Windows Environment:

- Program Editor Window
- Log Window
- Output Window
- Explorer Window
- Results Window

SAS Language:

- Data definitions and options
- DATA Step
- PROCedures

Ways to read data into SAS:

1. Using Cards/datalines statement

Data test;

```
Input a b c;
```

```
Datalines;
```

```
1 2 3
```

```
1 2 4
```

```
;
```

```
Run;
```

2. Reading from a file

Data test2;

```
Infile "C:\TestData.txt" ;
```

```
Input a b c;
```

```
Run;
```

3. Tab-Delimited File

Data test3;

```
Infile "C:\TestData.dat" dlm='09'x ;
```

```
Input a b c;
```

```
Run;
```

4. Variables or Comments at Top of Data File

Data test4;

```
Infile "C:\TestData.dat" dlm='09'x  
firstobs=5;
```

```
Input a b c;
```

```
Run;
```

5. Import Excel datafile
 - a. Variable names in the first row
 - b. No spaces in variable names

- c. Data in second row
- d. Use SAS import Wizard
 - i. File ->Import

Adding Formats

1. Create format

Proc format;

```
value sex
```

```
1 = "Male"
```

```
2 = "Female";
```

2. Apply format in a Data step

```
Data ctums2;
```

```
set ctums;
```

```
format
```

```
SEX sex.;
```

```
Run;
```

IF Statement

```
If sex = 1 then delete;
```

WHERE Statement

```
Where sex = 1;
```

NB: Both of these statements must be used in a Data step.

ODS – Output Delivery System

1. Select pieces of output to display
2. Save output in a different format – pdf, rtf

SAS/GRAPH

Several Procedures available

- Proc GCHART
- Proc GPLOT
- Proc G3D
- Proc GCONTOUR
- Proc GMAP

Customizable graphs