```
*SAS ONE WAY ANOVA;
/*
ANOVA stands for Analysis of Variance. In SAS it is done using PROC ANOVA.
 It performs analysis of data from a wide variety of experimental designs.
 In this process, a continuous response variable, known as a dependent variable,
 is measured under experimental conditions identified by classification variables,
 known as independent variables. The variation in the response is assumed to be
 due to effects in the classification,with random error accounting
 for the remaining variation.
Syntax:

CLASS gives the variables the variable used as classification variable.

MODEL defines the model to be fit using certain variables from the dataset.

Variable_1 and Variable_2 are the variable names of the dataset used in analysis.

MEANS defines the type of computation and comparison of means.
*/
```

```
PROC ANOVA DATA = SASHELPS.CARS;
CLASS type;
MODEL horsepower = type;
RUN;

*Applying ANOVA with MEANS;
/*
Let us now understand the concept of applying ANOVA with MEANS in SAS.
We can also extend the model by applying the MEANS statement in which
we use Turkey's
Studentized method to compare the mean values of various car types.
*/
```

```
PROC ANOVA DATA = SASHELPS.CARS;
CLASS type;
MODEL horsepower = type;
MEANS type / tukey lines;
RUN;
```