

```
*SAS - T Tests;
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/*
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The T-tests are performed to compute the confidence limits for one sample or two independent samples by comparing their means and mean differences. The SAS procedure named PROC TTEST is used to carry out t tests on a single variable and pair of variables.

Syntax:

```
PROC TTEST DATA = dataset;  
VAR variable;  
CLASS Variable;  
PAIRED Variable_1 * Variable_2;  
*/
```

```
.....  
PROC SQL;  
create table CARS1 as  
SELECT make, type, invoice, horsepower, length, weight  
      FROM  
      SASHELP.CARS  
      WHERE make in ('Audi','BMW')  
;  
RUN;
```

```
.....  
proc means data = cars1;  
run;  
proc ttest data = cars1 alpha = 0.05 h0 = 0;  
      var horsepower;  
      run;
```

```
*Paired T-test;
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/*
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The paired T Test is carried out to test if two dependent variables are statistically different from each other or not.

```
*/
```

```
.....  
proc ttest data = cars1 ;  
      paired weight*length;  
      run;
```

```
*Two sample t-test;
```

```
/*
```

This t-test is designed to compare means of same variable between two groups.

```
*/
```

```
.....  
proc ttest data=cars1 side=2 alpha=0.05 h0=0;  
title 'Two Sample t-test';  
class make;  
var horsepower;  
run;
```