Modify Units, Descriptions and Table Variable Names

This example shows how to access and modify table properties for variable units, descriptions and names. You also can edit these property values using the Variables Editor.

Load Sample Data

Load the sample patients data and create a table.

```
load patients
BloodPressure = [Systolic Diastolic];

T = table(Gender,Age,Height,Weight,Smoker,BloodPressure);
```

Display the first five rows of the table, `T`.

```
T(1:5,:)
```

```
ans = 5×6 table
```

...

	Gender	Age	Height	Weight	Smoker
1	'Male'	38	71	176	1
2	'Male'	43	69	163	0
3	'Female'	38	64	131	0
4	'Female'	40	67	133	0
5	'Female'	49	64	119	0

`T` has 100 rows and 6 variables.

Add Variable Units

Specify units for each variable in the table by modifying the table property, `VariableUnits`. Specify the variable units as a cell array of character vectors.

```
T.Properties.VariableUnits = {'' 'Yrs' 'In' 'Lbs' '' ''};
```

An individual empty character vector within the cell array indicates that the corresponding variable does not have units.

Add a Variable Description for a Single Variable

Add a variable description for the variable, `BloodPressure`. Assign a single character vector to the element of the cell array containing the description for `BloodPressure`.

```
T.Properties.VariableDescriptions{'BloodPressure'} = 'Systolic/Diastolic';
```

You can use the variable name, `'BloodPressure'`, or the numeric index of the variable, `6`, to index into the cell array of character vectors containing the variable descriptions.

Summarize the Table

View the data type, description, units, and other descriptive statistics for each variable by using `summary` to summarize the table.

```
summary(T)
```

```
Variables:

    Gender: 100×1 cell array of character vectors

    Age: 100×1 double

        Units:  Yrs
        Values:

            Min       25
            Median    39
            Max       50

    Height: 100×1 double

        Units:  In
        Values:

            Min       60
            Median    67
            Max       72

    Weight: 100×1 double

        Units:  Lbs
        Values:

            Min         111
            Median    142.5
            Max         202

    Smoker: 100×1 logical

        Values:

            True     34
            False    66

    BloodPressure: 100×2 double

        Description:  Systolic/Diastolic
        Values:
                      BloodPressure_1    BloodPressure_2
                      _______________    _______________

            Min       109                  68
            Median    122                81.5
```

```
Max        138                    99
```

The `BloodPressure` variable has a description and the `Age`, `Height`, `Weight`, and `BloodPressure` variables have units.

Change a Variable Name

Change the variable name for the first variable from `Gender` to `Sex`.

```
T.Properties.VariableNames{'Gender'} = 'Sex';
```

Display the first five rows of the table, `T`.

```
T(1:5,:)
```

```
ans = 5×6 table
```

...

	Sex	Age	Height	Weight	Smoker
1	'Male'	38	71	176	1
2	'Male'	43	69	163	0
3	'Female'	38	64	131	0
4	'Female'	40	67	133	0
5	'Female'	49	64	119	0

In addition to properties for variable units, descriptions and names, there are table properties for row and dimension names, a table description, and user data.