Exercise: Using the Linear Regression Task to Perform Stepwise Selection

Use the **bodyfat2** data set to identify a set of "best" models. Use significance-level model selection techniques.

1. Use the Stepwise Selection Method with Significance Level as the criterion in the Linear Regression task to identify a set of candidate models that predict **PctBodyFat2** as a function of the interval variables **Age**, **Weight**, **Height**, **Neck**, **Chest**, **Abdomen**, **Hip**, **Thigh**, **Knee**, **Ankle**, **Biceps**, **Forearm**, and **Wrist**. Use the default values for SLENTRY= and SLSTAY=. Submit the task and view the results.

2. Modify the task to specify the forward selection process (FORWARD). Submit the code and view the results.

3. How many variables would result from a model using forward selection and a significance-level-for-entry criterion of 0.05, instead of the default SLENTRY= value, 0.50? Modify and submit the code, and view the results.

Show Solution