Homework Solutions
Applied Regression Analysis

WEEK 2

Exercise One

Generate scatter diagrams for each of the following variable pairs:

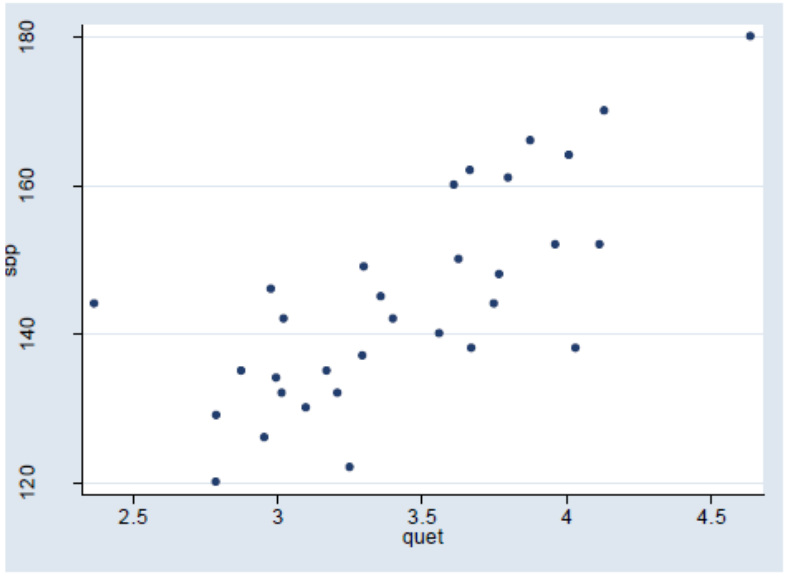
1. **SBP *(Y)* vs. QUET *(X)***

   In the command window, enter '.scatter sbp quet'

   This will produce the scatterplot of SBP (Y) and QUET (X). The resulting scatterplot displayed should resemble the screenshot depicted below

   (Note: Stata is case-sensitive so the variables should be lower-case if that is how they are coded in the dataset).

```
.scatter sbp quet
```

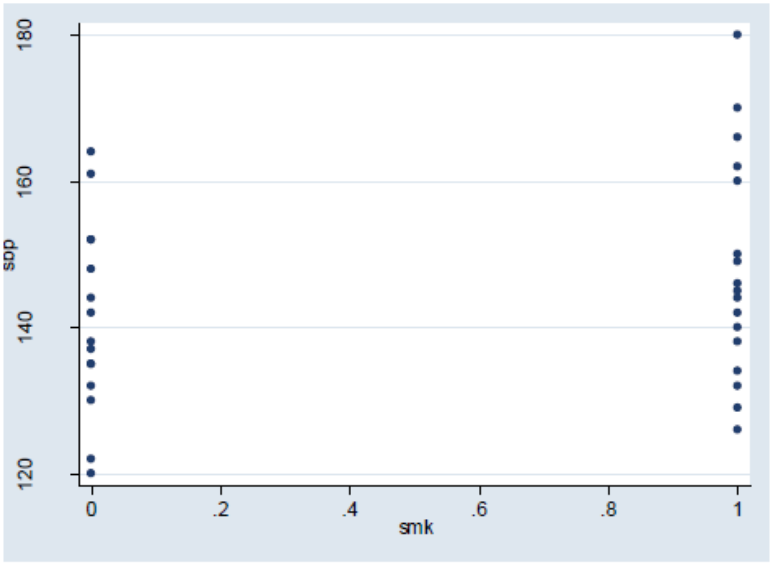


2. SBP *(Y)* vs. SMK *(X)*

In the command window, enter '.scatter sbp smk'.

This will produce the scatterplot of SBP (Y) and SMK (X). The resulting scatterplot displayed should resemble the screenshot depicted below.

```
. scatter sbp smk
```



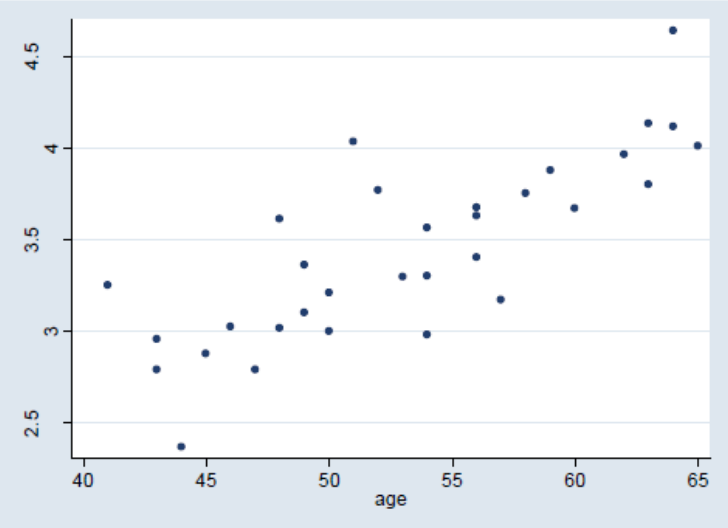
Note: Smoking is a binary variable, therefore we should not expect to see an even scatter of observations as with the other plots containing continuous variables.

3. QUET *(Y)* vs. AGE *(X)*

In the command window, enter '.scatter quet age'.

This will produce the scatterplot of QUET (Y) and AGE (X). The resulting scatterplot displayed should resemble the screenshot depicted below.

```
. scatter quet age
```



4. SBP *(Y)* vs. AGE *(X)*

In the command window, enter '.scatter sbp age'.

This will produce the scatterplot of SBP (Y) and AGE (X). The resulting scatterplot displayed should resemble the screenshot depicted below.

```
. scatter sbp age
```