

## HOMework 06

QUESTION: Using the following categories and the “Decision Tree Data” table in the Exercises section of Chapter Six/eight, discretize salary and age variables and solve problems 5 Chapter Six/eight (Decision Tree Chapter). Show only the first split.

### Salary Categories

Less than \$35000	= Level 1
\$35000 to less than \$45000	= Level 2
\$45000 to less than \$55000	= Level 3
Above \$55000	= Level 4

### Age Categories

Less than or equal to 30	= Category 1
Greater than 30 but less than or equal to 40	= Category 2
Above 40	= Category 3

### REFERENCE

**TABLE E6.4 Decision Tree Data**

Occupation	Gender	Age	Salary
Service	Female	45	\$48,000
	Male	25	\$25,000
	Male	33	\$35,000
Management	Male	25	\$45,000
	Female	35	\$65,000
	Male	26	\$45,000
	Female	45	\$70,000
Sales	Female	40	\$50,000
	Male	30	\$40,000
Staff	Female	50	\$40,000
	Male	25	\$25,000

Construct a classification and regression tree to classify *salary* based on the other variables. Do as much as you can by hand, before turning to the software.