# Assessment 2D – Week 5 Workbook Exercise

## Decision Trees and Cluster Analysis

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| Question | Answer | SAS VA visualisation reference |
| 1. On which variable is the first split in the tree? | Age | Decision Tree 1  Tree Pane |
| 1. How many leaf nodes are in the tree? | 15 | Decision Tree 1  Tree Pane |
| 1. What is the cumulative lift in the model at the 5th percentile? | 3.3519 | Decision Tree 1  Assessment Pane |
| 1. What is the K-S statistic for the model? | 0.4511 | Decision Tree 1  Assessment Pane |
| 1. How many false negatives are there? | 15,340 | Decision Tree 1  Assessment Pane |
| 1. Which node has the highest percent of target event 1? | 9 (92.19%) | Decision Tree 1  Leaf Statistics Pane |
| 1. Which node provides the highest gain? | 21 (0.2115) | Decision Tree 1  Node Statistics |
| 1. What splitting rules are applied to this node? | Affluence Grade >= 15.3  Age < 42.4 | Decision Tree 1  Node Rules |
| 1. Which model is selected when the fit statistic is Misclassification? | Logistic – with IM & VarSel |  |
| 1. Which model is the next best model based on Misclassification? | Decision Tree 1 |  |

