The "breast cancer dataset" in CANVAS was obtained from the University of Wisconsin Hospitals, Madison from Dr. William H. Wolberg. The features in the dataset, described below, have been categorized from 1 to 10.
Use these categorized features to answer the following questions.
Important: make sure your categories are represented by the "factor" data type in R and DO NOT replace the missing values.

```
   Features                        Domain
-- ----------------------------------------
Sample code number              id number
F1. Clump Thickness              1 - 10
F2. Uniformity of Cell Size      1 - 10
F3. Uniformity of Cell Shape     1 - 10
F4. Marginal Adhesion            1 - 10
F5. Single Epithelial Cell Size  1 - 10
F6. Bare Nuclei                  1 - 10
F7. Bland Chromatin              1 - 10
F8. Normal Nucleoli              1 - 10
F9. Mitoses                      1 - 10
Diagnosis Class:                 (2 for benign, 4 for malignant)
```

6.1
Use the C5.0 methodology to develop a classification model for the Diagnosis.

6.2
Use the Random Forest methodology to develop a classification model for the Diagnosis and identify important features.