1. The data set cereals contain nutritional information for 77 breakfast cereals. We are interested in estimating the nutritional rating given some of the other variables
   1. Read the data set cereals into R
   2. Plot a 3d scatter plot of the variable rating and the variables sugar and fibres on the other axis. Interpret the scatter plot. Describe the relationship between the response variable and the other variables
   3. Perform a simple linear regression analysis with rating as dependent variable and sugar as independent variable. Interpret the results
   4. Perform a simple linear regression analysis with rating as dependent variable and fibre as independent variable. Interpret the results
   5. Perform a multiple linear regression analysis with rating as dependent variable and fibre and sugar as independent variables. Interpret the results
   6. Estimate the regression equation
2. Medical researchers want to explore the relationship between patient age and the presence (disease = 1) or absence (disease = 0) of a disease (target column)
   1. Read the data set disease into R
   2. Construct a scatter plot of the disease. Is the linear relationship obvious?
   3. Fit a logistic regression model to the data
   4. Find the estimated regression equation for this model
3. The data set churn contains customer information for a telecommunication company. We are interested in predicting whether a customer would leave the company’s service (=churn) or not based on a set of predictor variables
   1. Read the data set churn into R
   2. Perform multiple logistic regression analysis with Churn as response variable and Day Minutes, Evening Minutes, Evening Minutes, Night Minutes, International Minutes, International Plan, VoiceMail Plan and CustServ.Calls as predictors

Separate the data into 70% and 30% as train and test data and check the accuracy of the model