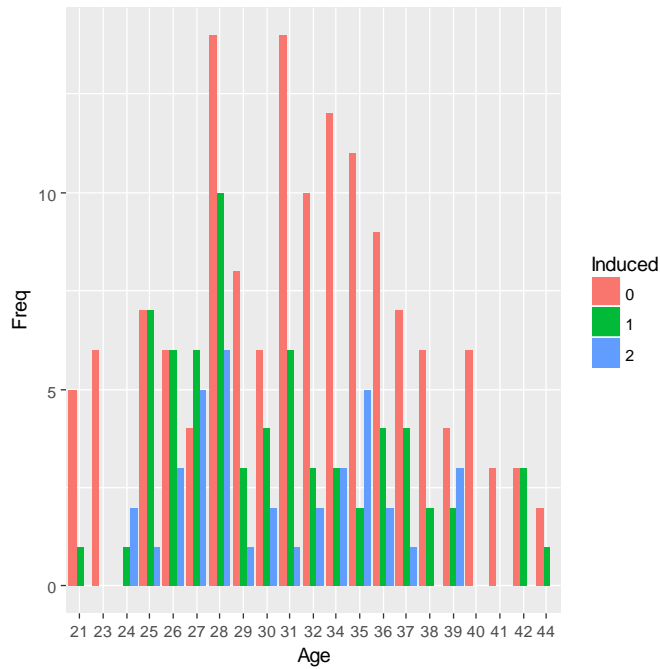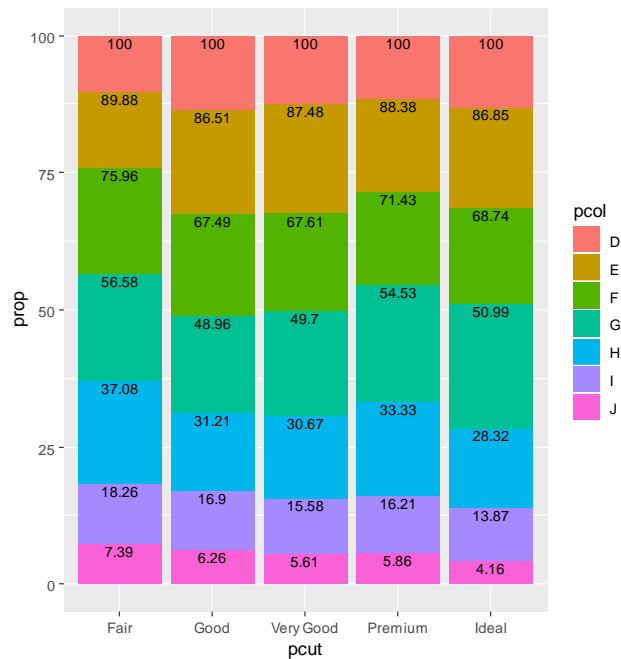Exercise Bars and Lines Graphs

1. Plot the grouped bar chart for the frequency of induced against the age from the `infert` data set. The bars are grouped such that for each variable age, there are 3 bars of different types of induced 0, 1, 2. Make sure that the bars are all of equal width, i.e. take into account the NA values where necessary.

2. Plot a stacked bar chart using the `diamonds` data set. The variable `cut` is taken for the x-axis and the proportion of diamonds based on colours are taken as the y-axis. Insert the values of proportions in the graph.

3. Produce a multiple line graph for the price of diamonds which are less than $5000 against the carat of diamonds which are less than 1 for each colour of diamonds and clarity equals to "IF". Each line representing a different colour of diamonds and the lines are differentiate based on different colours of lines. Then, produce another multiple line plot for only the Ideal and Premium diamonds of color G and H, i.e. two lines representing ideal and premium diamonds respectively. The two lines are differentiated using different shapes of points and different types of lines. However, the colour for the two lines are the same. (Use the `diamonds` data set.)