EXERCISE
Advanced graphics 3 (histogram-heat map)

Histogram

Use the excel file "RCC" containing the data about Renal cell carcinoma patients

1. **Draw basic histogram for MALAT1**

2. **Change binwidth to 3, make the bars purple and their borders white**

3. **Make the background white**

4. **Fill according to Grade**

5. **Make coloured bars beside each other instead of on top each other (dodge)**

6. **Facet by Side**

7. **Add density to the histogram and make its transparency (alpha)=0.7**

Heat map

Use the excel file "LP" containing data for the lipid profile

1. **Convert LP to matrix**

2. **Draw using heatmap.2 (very basic code)**

3. **Make the scaling according to the row**

4. **Make the colours bluered(200)**

5. **Remove the row labels on the right and the histograms inside (trace)**

6. **Add a colour key of size 2**

7. **Remove the density info (histogram) from the key**

8. **Reduce the size of the lipid labels (making them 1.5)**

9. **Heatmap only the most variable observations**