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