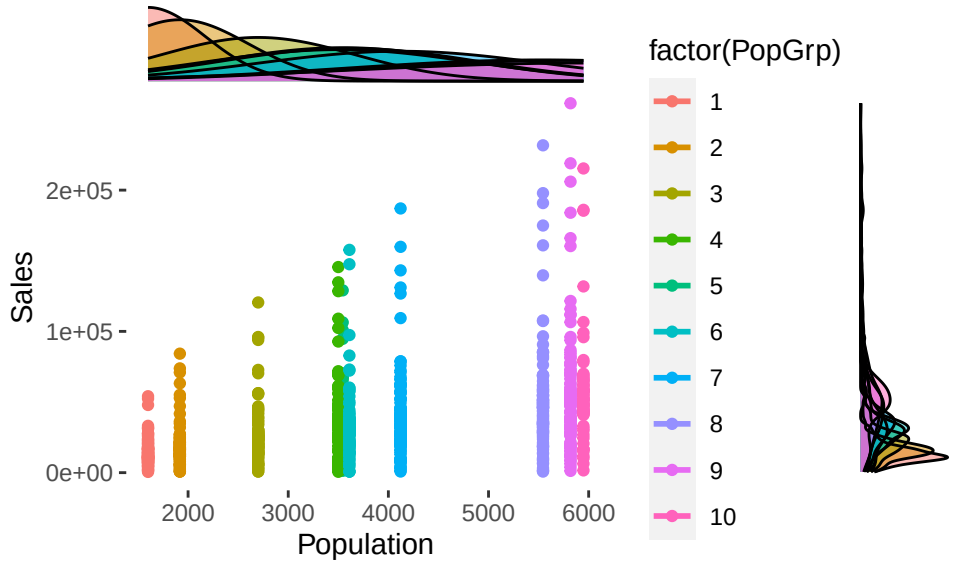
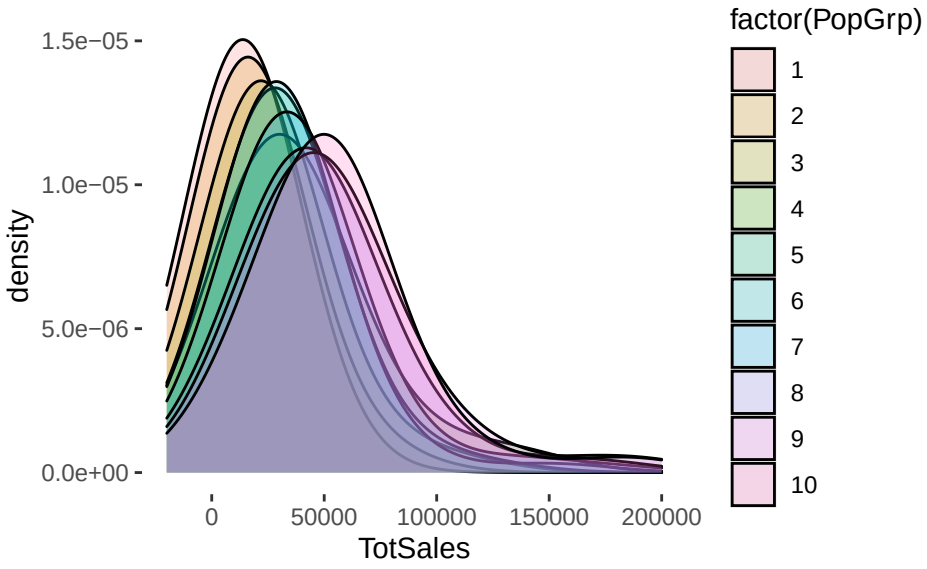
Foundations for Bayesian Analysis Homework

Data and EDA

Load the data from last week *(Sales Transactions)*, and filter for Q4. Summarize by Description, Population, MerGroup, MfgPromo and Wk. Create a visualization of TotSales ~ Population Group *(converted to factor)*, as follows:



Now show sales distributions by Population Group:

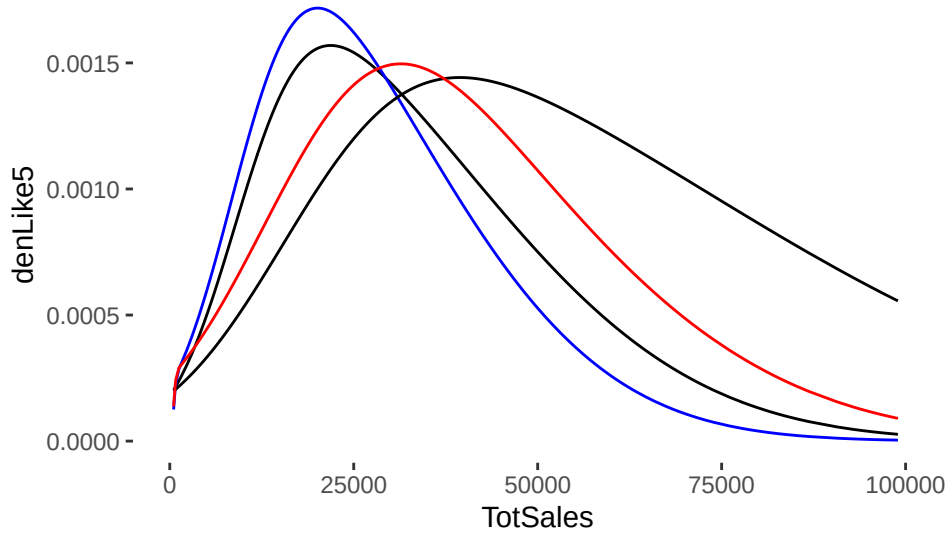


(note: this is not a normal distribution - take a look at the sn package)

Deliverables:

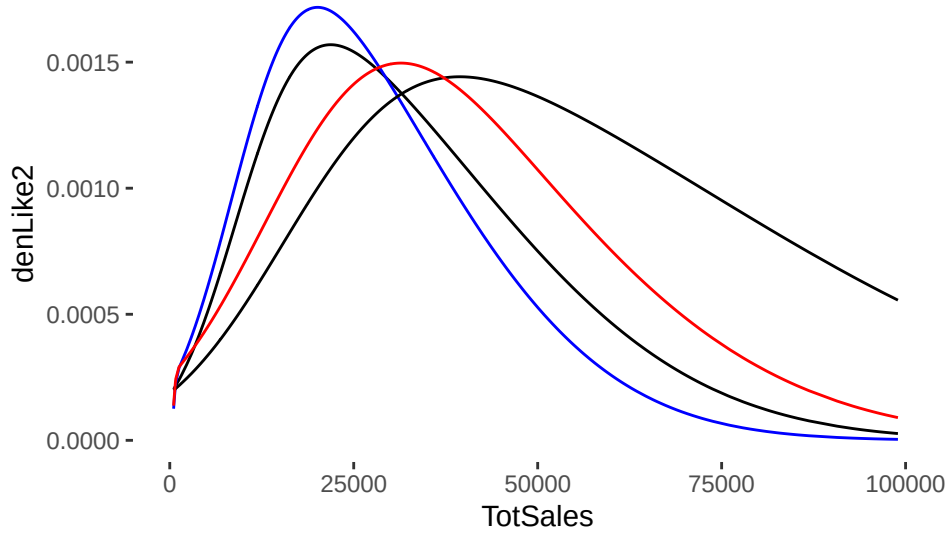
1. Posterior distributions for TotSales: Population Groups 5 and 10.

```
## [1] 1
## [1] 1
## [1] 1
## [1] 1
```

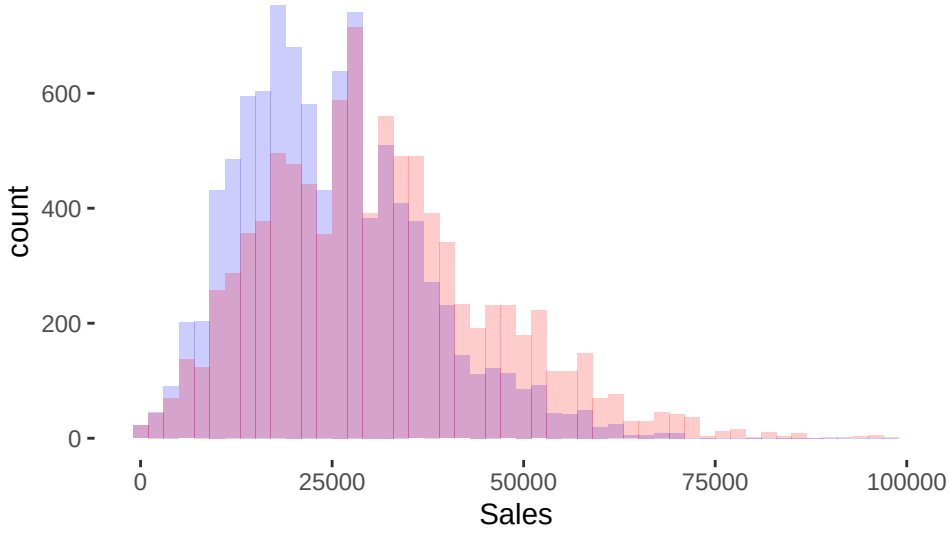


2. Determine probablity of a weekly sales exceeding 20,000 in groups 2 and 6

Take a look at densities:



Create simulations:



Get parameters and run probability functions:

```
##   Description      Prob
## 1  PopGrp = 2 0.6089974
## 2  PopGrp = 6 0.7528672
```