Use RStudio and R functions to solve the following

1. (20 pts) If X is $BINO(n = 12, p = 0.25)$, find
   a) $P(X \leq 2)$
   b) $P(0.7 < X \leq 3.1)$
2. (30 pts) If X is $NORM(\mu = 1.9, \sigma = 0.6)$, find
   a) $P(X > 2)$
   b) $P(0.7 < X < 3.1)$
   c) the 95th percentile of X
3. (30 pts) Use R function `pexp( )` to solve Exercise B-3 from Appendix B, textbook.
4. (20 pts) For the Bookstore example discussed in class find the `order_size` that leads to the smallest probability of a loss.

Submit your report as a pdf file onto Blackboard showing your name and USC ID. Report must be made of letter size pages in portrait format (not landscape). Screenshots are not allowed.