1. Write an R function that takes ShortReadQ reads, trims low quality bases from these reads, and removes the reads that after trimming are shorter than the minimum length. In addition to the reads, the function takes three parameters: *minimum quality*, *first base* and *minimum length*. (10 points)

2. Generate a random sample of 10000 reads from the dataset that you used in the lab. Then apply the function you created in Question 1 to generate a new dataset such that the minimum quality score is 20 and the minimum sequence length is 30. Then use *table (width())* functions to summarize the remaining sequences in the new dataset. (10 bonus points)