

# Week 3 R Functions: Lab 6 Supplement

Nathan Joseph

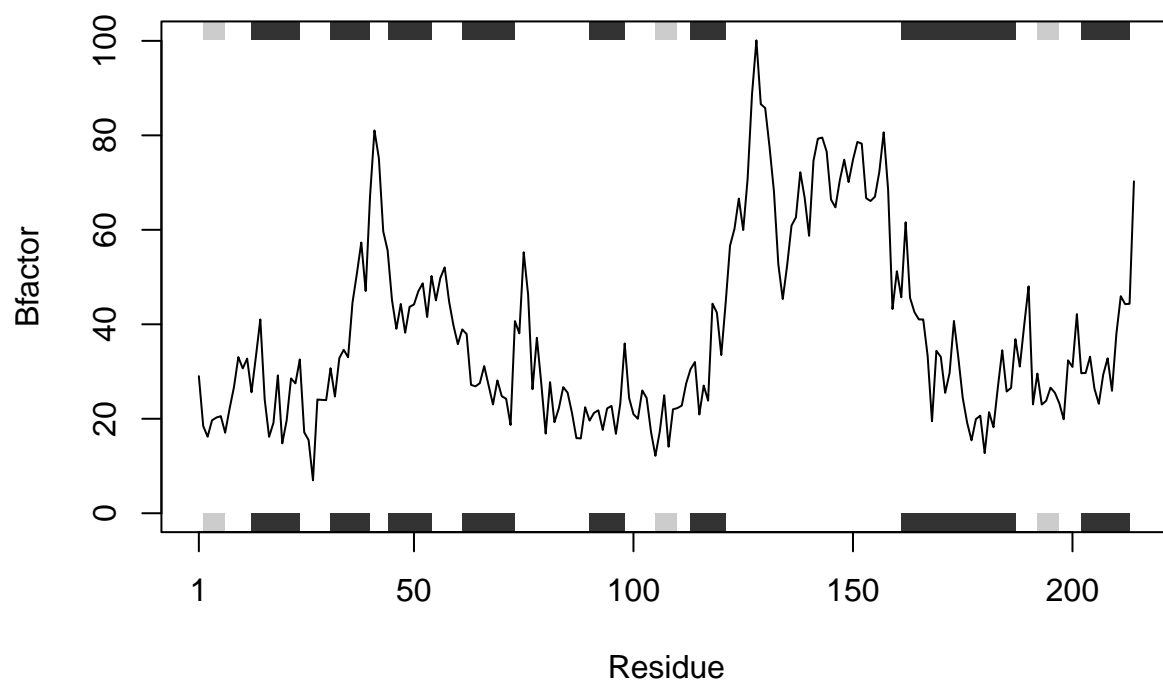
2026-01-23

Q6:

```
library(bio3d) # importing bio3d for use in the helper function
helper <- function(proteins){ #function line takes in a vector of protein PDB
  # datas and then outputs the associated plot for that specific protein
  for (i in proteins){ #looping through the vector of protein PDB datas
    s <- read.pdb(i) #1. Reading the pdb of the specific protein
    s.chainA <- trim.pdb(s, chain="A", elety="CA") #2. Assigning chain A using trim.pdb()
    s.b <- s.chainA$atom$b #3. Assigning b from Chain A
    #4. Plotting the protein:
    plotb3(s.b, sse=s.chainA, typ="l", ylab="Bfactor", main = paste("B-factor Plot for", i))
  }
}
helper(c("4AKE", "1AKE", "1E4Y"))
```

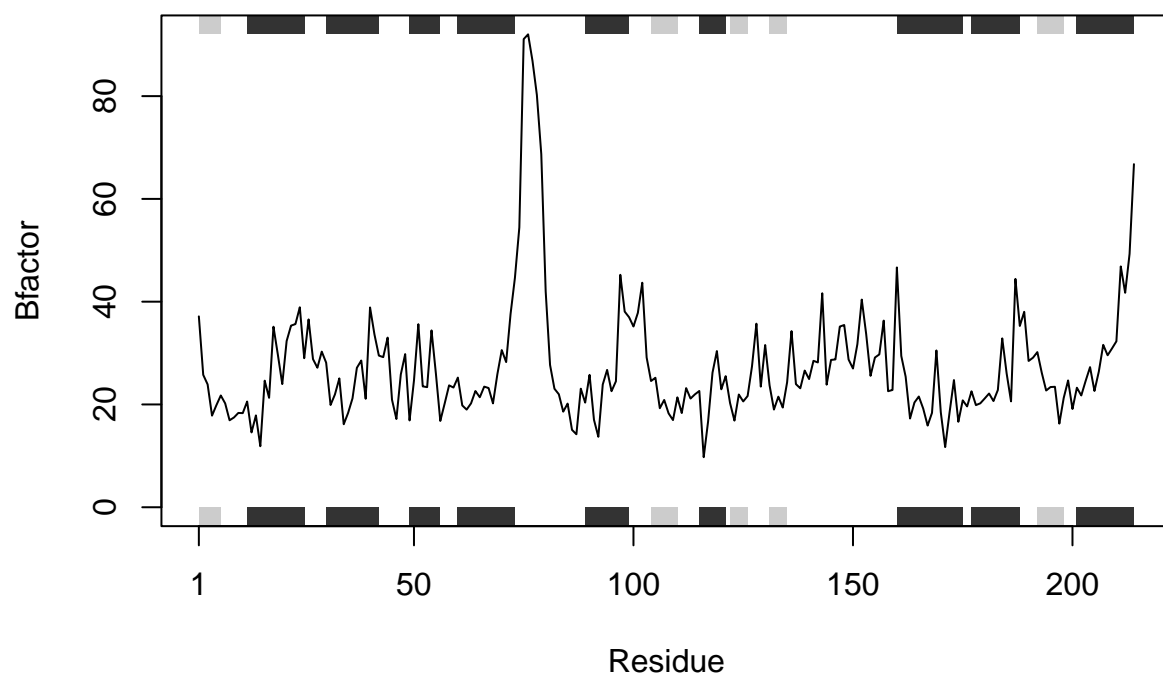
## Note: Accessing on-line PDB file

## B-factor Plot for 4AKE



```
## Note: Accessing on-line PDB file
## PDB has ALT records, taking A only, rm.alt=TRUE
```

### B-factor Plot for 1AKE



## Note: Accessing on-line PDB file

**B-factor Plot for 1E4Y**

