Creating a color vector to use in a plot:

testcolors <- ifelse(testscores >= 80, "blue", "red")

Creates a vector that loops through the testscores data and runs the conditional statement: 'If this entry in testscores is greater than or equal to 80, add "blue" to the testcolors vector; otherwise add "red" to the testcolors vector.'

barplot(testscores, col=testcolors)

Color by factors:

qplot(factor(cyl), data=mtcars, geom="bar", fill=factor(cyl)