ExtraLab_SHalbritter

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```
state.dat <- read.csv("IncomeLifeExpectancy.csv")
voteRec <- as.factor(state.dat$Obam2008)
model <- lm(state.dat$LifeExp ~ state.dat$Income)

#plot
plot(state.dat$Income, state.dat$LifeExp,
     type="n", bty="n", xaxt="n", yaxt="n", xlim=c(2990,6000), ylim=c(67.7,74),
     ylab="Life Expectancy (Years)", xlab="Per Capita Income ($)",
     main="Relationship Between Income and Life Expectancy in the U.S.")

#abline and segments
abline(model, col="gray30", lty=3)
segments(x0=state.dat$Income, y0=model$fitted.values, y1=state.dat$LifeExp, col="lightgra
y")

#points
points(state.dat$Income, state.dat$LifeExp, pch=19, col=c("firebrick3", "dodgerblue3")[vo
teRec])

#statenames
text(x=state.dat$Income, y=state.dat$LifeExp, labels=state.dat$Abbrev,
     pos=4, offset=.3, cex=.75, col=c("indianred", "dodgerblue1")[voteRec])

#add axis labels
text(seq(from=3000, to=6000, by=500), 67.8, paste("$", seq(from=3000, to=6000, by=500), s
ep=""), col="gray30")
text(2900, seq(from=68, to=74, by=1), seq(from=68, to=74, by=1), col="gray30")

#legend
text(5800, 69.5, "Presidential Voting Record 2008", col="gray25")
points(5600, 69, pch=19, cex=1.5, col="firebrick3")
text(5700, 69, "McCain", col="indianred")
points(5600, 69.25, pch=19, cex=1.5, col="dodgerblue3")
text(5700, 69.25, "Obama", col="dodgerblue1")
```

Relationship Between Income and Life Expectancy in the U.S.