A LM

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \epsilon$$

Good Luck!

```
> m3<-lm(Hours~Xray+BedDays+Length)
> summary(m3)

Call: lm(formula = Hours ~ Xray + BedDays + Length)
.........
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) 1946.80204  504.18193   3.861  0.00226 **
Xray           0.03858    0.01304   2.958  0.01197 *      (HT1)
BedDays        1.03939    0.06756  15.386 2.91e-09 ***
Length      -413.75780   98.59828  -4.196  0.00124 **
---
Residual standard error: 387.2 on 12 degrees of freedom
Multiple R-Squared: 0.9961,    Adjusted R-squared: 0.9952
F-statistic:  1028 on 3 and 12 DF,  p-value: 9.92e-15    (HT2)


> par(mfrow=c(2,2)); plot(m3)
> m1<-lm(Hours~Xray);summary(m1);

Call: lm(formula = Hours ~ Xray)
.......
Coefficients:
              Estimate Std. Error t value Pr(>|t|)
(Intercept) 478.33408  622.21897    0.769    0.455
Xray          0.24447    0.02317  10.553 4.78e-08 ***    (HT3)
---
Residual standard error: 1924 on 14 degrees of freedom
Multiple R-Squared: 0.8883,    Adjusted R-squared: 0.8803
F-statistic: 111.4 on 1 and 14 DF,  p-value: 4.778e-08    (HT4)
```

A   LM