```
# Task C
trees<-read.delim2("clipboard")
summary(trees)

lm.2<-lm(tree.height~age, data=trees)
summary(lm.2)
plot(lm.2)

anova(lm.2)

plot(tree.height~age, data=trees)


abline(coef(lm.2))

pred2<-predict(lm.2, newdata = data.frame(age=seq(3.5, 19.5, by=0.1)), se=T)
summary(pred2)
pred2$df


lines(seq(3.5, 19.5, by=0.1), pred2$fit)
lines(seq(3.5, 19.5, by=0.1), pred2$fit+pred2$se.fit*qt(0.975, pred2$df), lty=2)
lines(seq(3.5, 19.5, by=0.1), pred2$fit+pred2$se.fit*qt(0.025, pred2$df), lty=2)
```

```
Call:
lm(formula = tree.height ~ age, data = trees)

Residuals:
     Min      1Q   Median      3Q      Max
-0.78154 -0.35686 -0.03737  0.46167  0.56491

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  2.99572    0.34361   8.718 2.34e-05 ***
age         -0.10968    0.02846  -3.854  0.00485 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 0.5001 on 8 degrees of freedom
Multiple R-squared:   0.65,      Adjusted R-squared:   0.6062
F-statistic: 14.85 on 1 and 8 DF,  p-value: 0.004849
```