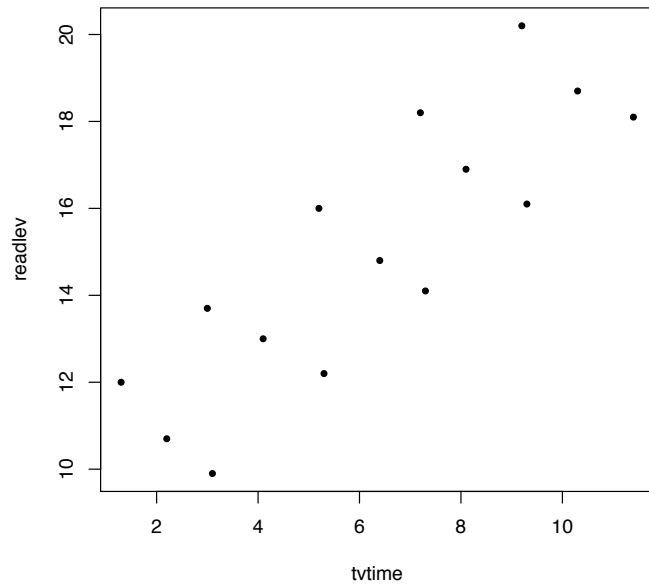


```
>read.data=read.table("readlev.txt",header=TRUE)
>attach(read.data)
>plot(tvtime,readlev,pch=20)
```



```
> summary(lm(readlev~tvtime))
```

```
Call:
lm(formula = readlev ~ tvtime)
```

```
Residuals:
    Min     1Q   Median     3Q     Max
-2.4285 -1.3613 -0.1744  1.3251  2.7115
```

```
Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  9.7062     1.0203   9.513 3.20e-07 ***
tvtime       0.8459     0.1477   5.728 6.96e-05 ***
```

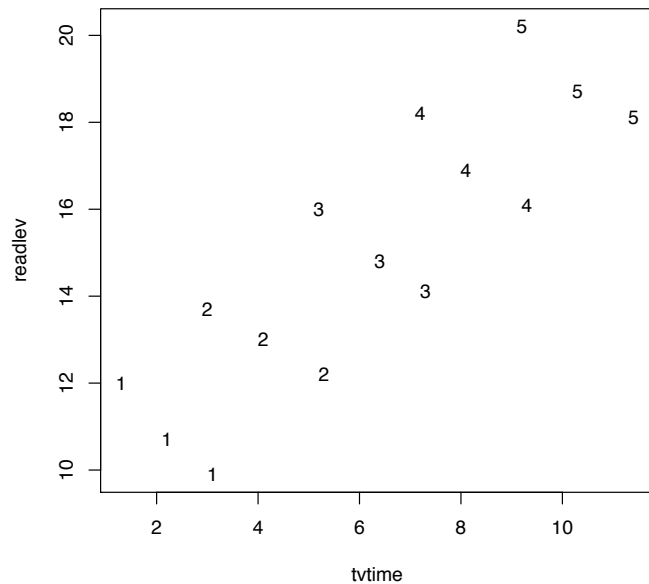
```
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Residual standard error: 1.712 on 13 degrees of freedom
Multiple R-Squared:  0.7162,    Adjusted R-squared:  0.6944
F-statistic: 32.81 on 1 and 13 DF, p-value: 6.964e-05
```

```

>plot(tvtime,readlev,pch=20,type="n")#plots the graph without any
points; helps to get the range for the axes correctly
>points(tvtime[grade==1],readlev[grade==1],pch="1")
>points(tvtime[grade==2],readlev[grade==2],pch="2")
>points(tvtime[grade==3],readlev[grade==3],pch="3")
>points(tvtime[grade==4],readlev[grade==4],pch="4")
>points(tvtime[grade==5],readlev[grade==5],pch="5")

```



```

> summary(lm(readlev~tvtime+grade))

```

```

Call:
lm(formula = readlev ~ tvtime + grade)

```

```

Residuals:
    Min       1Q   Median       3Q      Max
-0.32849 -0.16684  0.04113  0.13697  0.30638

```

```

Coefficients:
            Estimate Std. Error t value Pr(>|t|)
(Intercept)  8.99661    0.13650   65.91 < 2e-16 ***
tvtime      -0.90873    0.06728  -13.51 1.28e-08 ***
grade        3.87835    0.14240   27.24 3.70e-12 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

```

```

Residual standard error: 0.2248 on 12 degrees of freedom
Multiple R-Squared:  0.9955,    Adjusted R-squared:  0.9947
F-statistic: 1322 on 2 and 12 DF,  p-value: 8.505e-15

```