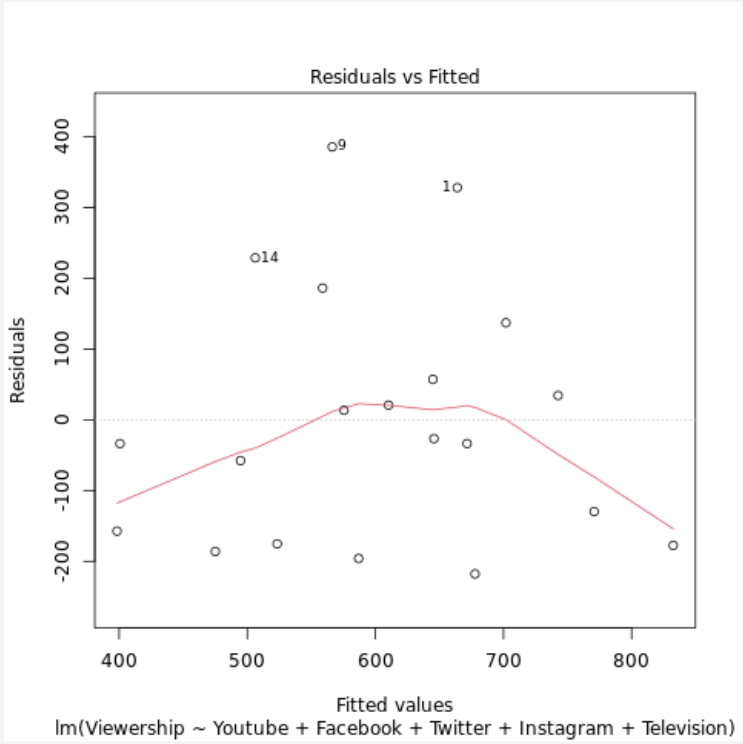
```
#Channels_of_advertising_multiple_linear_regression

print("Viewership on different media")
print("Rishabh")

Viewership<-c(992, 638, 367, 241, 289, 655, 631, 745, 952, 702, 641, 619, 777, 735, 460, 391, 437, 839, 589, 348)

Youtube<-c(778, 313, 307, 491, 585, 809, 516, 677, 322, 530, 666, 574, 866, 508, 932, 192, 298, 433, 608, 284)
Facebook<-c(191, 591, 657, 813, 640, 444, 947, 695, 425, 350, 618, 301, 540, 803, 100, 413, 352, 381, 362, 433)
Twitter<-c(316, 725, 124, 273, 575, 410, 710, 976, 294, 709, 634, 501, 244, 852, 475, 905, 421, 895, 744, 787)
Instagram<-c(693, 190, 552, 745, 955, 107, 352, 991, 326, 660, 204, 560, 295, 829, 980, 514, 667, 449, 930, 704)
Television<-c(529, 480, 670, 914, 269, 970, 734, 925, 656, 138, 462, 843, 565, 762, 454, 815, 173, 768, 745, 999)

model<-lm(Viewership ~ Youtube + Facebook + Twitter + Instagram + Television)

print(model)
plot(model)
summary(model)
predict(model)
```

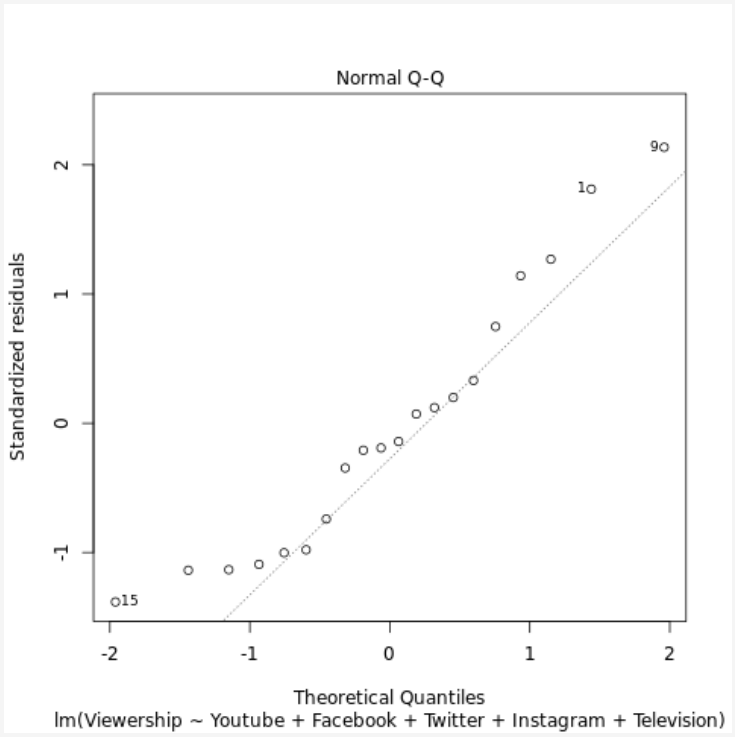
Output

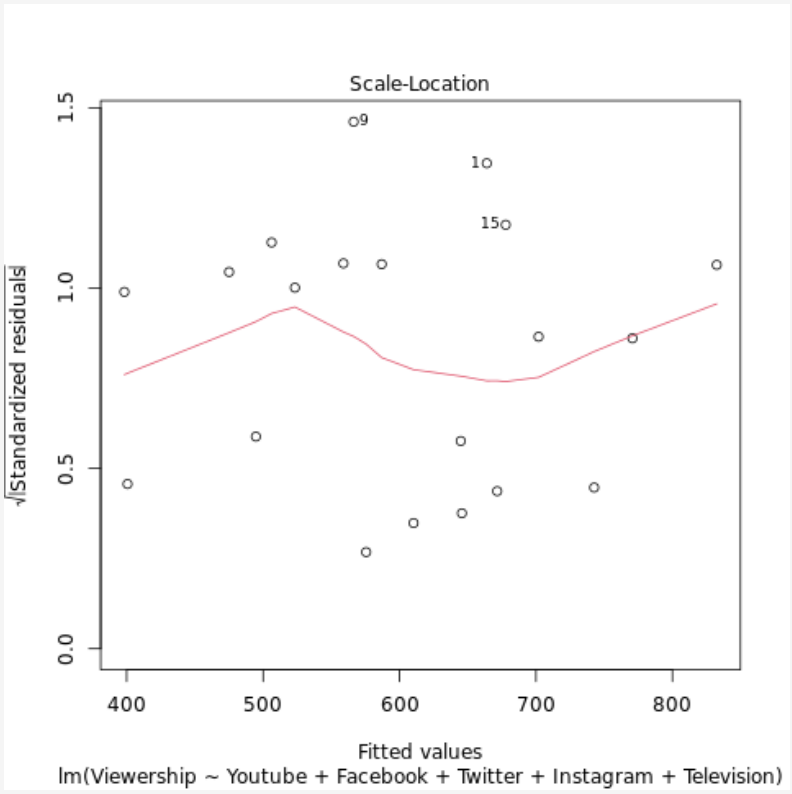
```
[1] "Viewership on different media"
[1] "Rishabh"

Call:
lm(formula = Viewership ~ Youtube + Facebook + Twitter + Instagram +
    Television)

Coefficients:
(Intercept)      Youtube     Facebook      Twitter    Instagram
Television
  594.80640      0.36442     -0.20364      0.21586     -0.33653
-0.01979
```

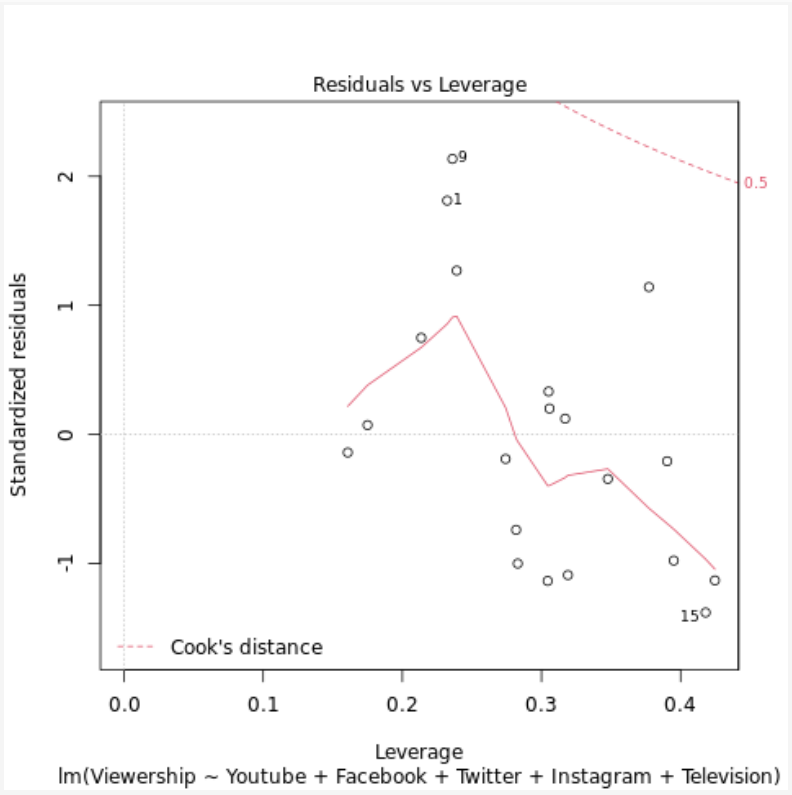
```
Call:
lm(formula = Viewership ~ Youtube + Facebook + Twitter + Instagram +
    Television)

Residuals:
    Min      1Q  Median      3Q     Max
-217.83 -161.81  -30.14   77.11  385.62

Coefficients:
             Estimate Std. Error t value Pr(>|t|)
(Intercept) 594.80640  252.50484   2.356   0.0336 *
Youtube       0.36442    0.23698   1.538   0.1464
Facebook     -0.20364    0.23223  -0.877   0.3954
Twitter       0.21586    0.20354   1.061   0.3069
Instagram    -0.33653    0.17985  -1.871   0.0824 .
Television   -0.01979    0.19512  -0.101   0.9207
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 206.6 on 14 degrees of freedom
Multiple R-squared:  0.3021,     Adjusted R-squared:  0.05279
F-statistic: 1.212 on 5 and 14 DF,  p-value: 0.3538

       1        2        3        4        5        6        7
8
663.9564 671.5799 400.6361 398.3059 475.0724 832.5061 610.2801
558.8620
       9       10       11       12       13       14       15
16
566.3757 644.8787 770.7235 645.6941 742.6426 506.2598 677.8289
586.9207
      17       18       19       20
494.7097 701.9085 575.5386 523.3204
```

```
[Execution complete with exit code 0]
```






Scale-Location
√|Standardized residuals|
Fitted values
lm(Viewership ~ Youtube + Facebook + Twitter + Instagram + Television)


Residuals vs Leverage
Standardized residuals
Cook's distance
Leverage
lm(Viewership ~ Youtube + Facebook + Twitter + Instagram + Television)