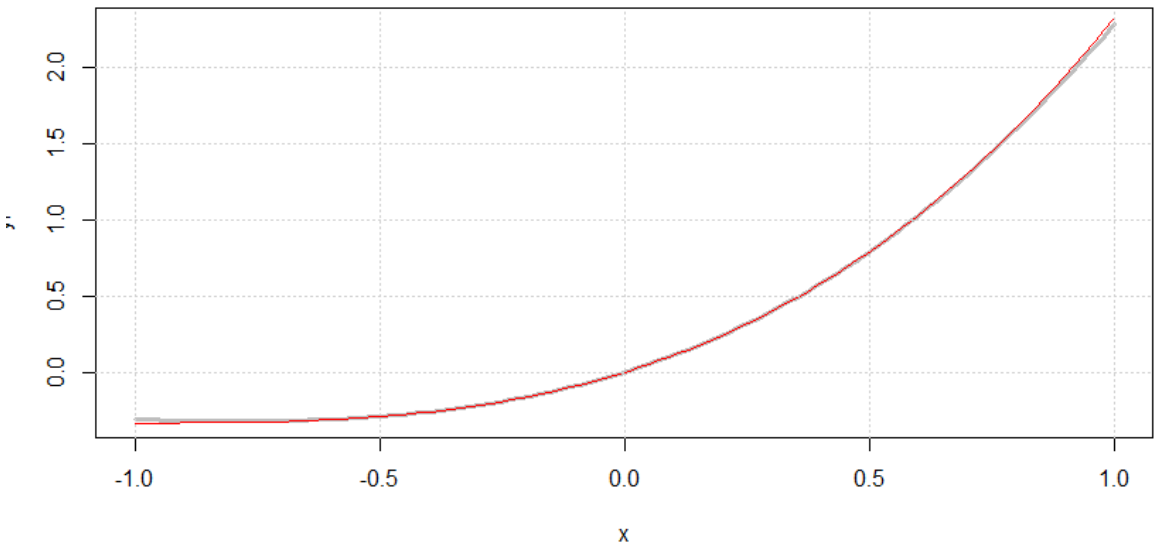
```
>   cat("Suma ",suma," Error ",error)
Suma  136  Error  1.6
>
```

1. B)

```
#variables y valores
n <- 4
suma <- 0
error <- 0
Matriz <- matrix(1:100, nrow = n, ncol = n)


#ciclo for
for(i in 1: n){
  for (j in 1: n){
    suma = suma + Matriz[i,j]
    error = error+0.1
  }
}
  cat("Suma ",suma," Error ",error)
```

3 b) Basado en librería de Python: https://rdrr.io/rforge/pracma/man/taylor.html

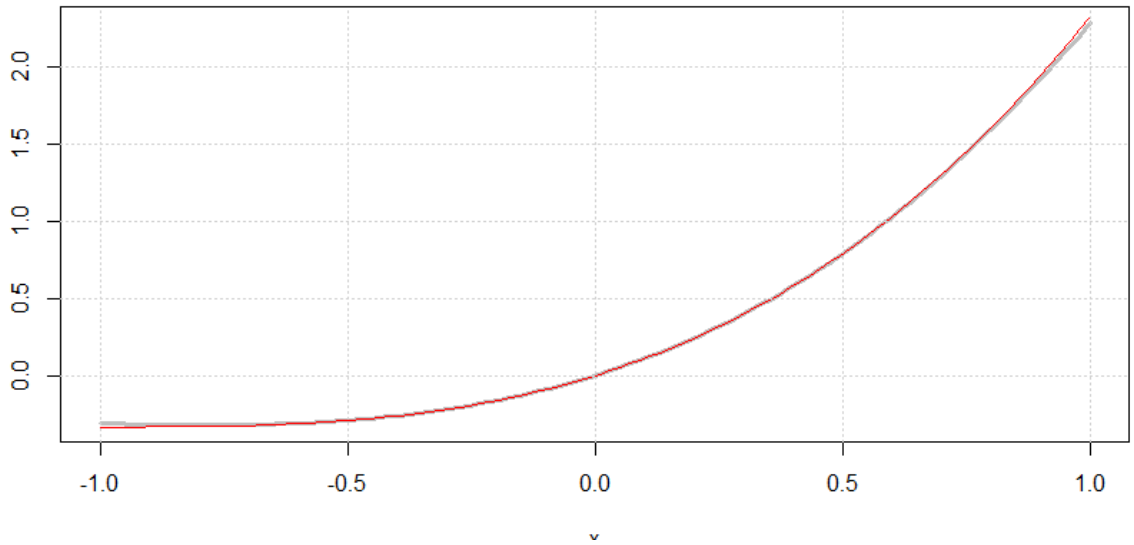



```
> p
[1] 0.3333332 1.0000000 1.0000000 0.0000000
```

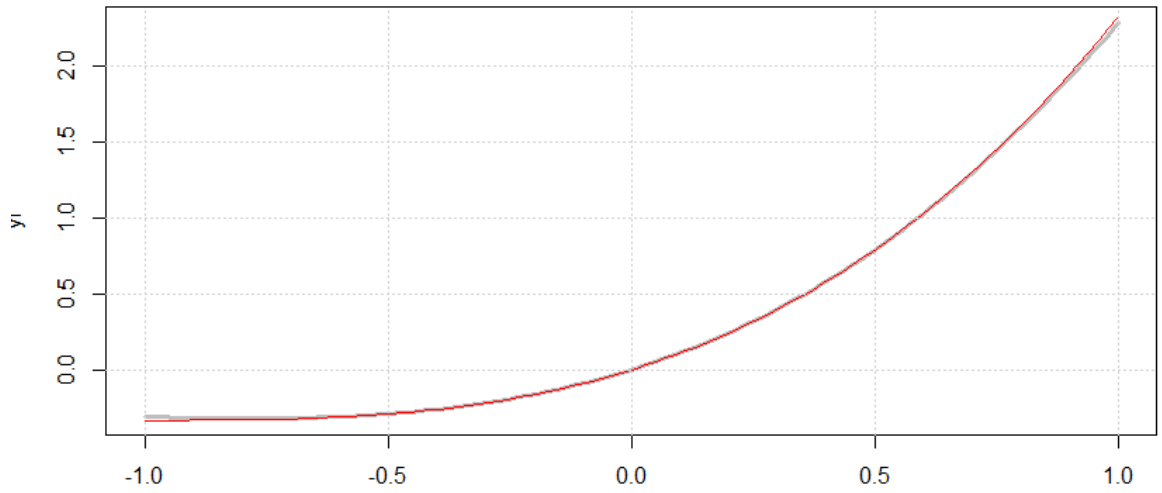
```r
library(pracma)


f <- function(x) exp(x)*sin(x)
p <- taylor(f, 0, 3)

x <- seq(-1.0, 1.0, length.out=100)
yf <- f(x)
yp <- polyval(p, x)
plot(x, yf, type = "l", col = "gray", lwd = 3)
lines(x, yp, col = "red")
grid()


p
```

0.0005

```
> p
[1] 3.333249e-01 1.000000e+00 1.000000e+00 3.701209e-13
>
```



0.0001




```
> p
[1]  3.333332e-01  1.000000e+00  1.000000e+00 -1.222133e-15
>
```

0.0000099

```
> p
[1] -2.728873e-01  2.287356e+00 -4.201140e-07  2.728872e-01
>
```