```
disp('Grupo 5')
Grupo 5
disp('NRC: 7543')
NRC: 7543
date

ans =

    '02-Jan-2022'

clock

ans =

   1.0e+03 *

  Columns 1 through 3

   2.022000000000000   0.001000000000000   0.002000000000000

  Columns 4 through 6

   0.023000000000000   0.025000000000000   0.026977000000000

clc
help fac
  <strong>fac</strong> Resuleve el ajuste de curvas
  <strong>Modos de entrada</strong>
  [X,Y,r] = <strong>fac</strong>(M)
  [X,Y,r,Ec,Ea,Er] = <strong>fac</strong>(M,m)
  [X,Y,r,Ec,Ea,Er,y] = <strong>fac</strong>(M,m,x)

  <strong>Valores de entrada</strong>
  <strong>M:</strong> Matriz de pares ordenados [xi;yi]
  <strong>m:</strong> Tipo de ajuste:
    0 - Lineal
    1 - Cuadratico
    2 - Cubico
    3 - Exponencial
  <strong>x:</strong> Valor a comprovar dentro del ajuste ya efectuado

  <strong>Valores de Salida</strong>
  <strong>X:</strong> Lista de puntos en x
  <strong>Y:</strong> Lista de puntos en y
  <strong>r:</strong> Coeficiente de correlacion -1 < r < 1
  <strong>Ec:</strong> Ecuacion nde regresion
  <strong>Ea:</strong> Error absoluto
  <strong>Er:</strong> Error relativo
  <strong>y:</strong>  Valor de Ec evaluado en x

data = readtable('C:\Users\ismae\OneDrive\Escritorio\Ejercicio.csv');
[ Warning: Column headers from the file were modified to make them
valid MATLAB identifiers before creating variable names for the
table. The original column headers are saved in the
VariableDescriptions property.
Set 'PreserveVariableNames' to true to use the original column
headers as table variable names.]
data = data{:,:}
```

```
data =

  1.0e+03 *

 Columns 1 through 3

    0.011860000000000    0.107200000000000    0.319000000000000
    0.010400000000000    0.085300000000000    0.240000000000000
    0.009230000000000    0.067430000000000    0.190000000000000
    0.008250000000000    0.053480000000000    0.150000000000000
    0.007350000000000    0.042410000000000    0.120000000000000
    0.006540000000000    0.033630000000000    0.096000000000000
    0.005830000000000    0.026670000000000    0.078000000000000
    0.005190000000000    0.021150000000000    0.060000000000000
    0.004620000000000    0.016770000000000    0.048000000000000
    0.004120000000000    0.013300000000000    0.038000000000000
    0.003670000000000    0.010550000000000    0.030000000000000
    0.003260000000000    0.008360000000000    0.024000000000000
    0.002910000000000    0.006630000000000    0.019000000000000
    0.002590000000000    0.005260000000000    0.015000000000000
    0.002310000000000    0.004170000000000    0.012000000000000
    0.002050000000000    0.003310000000000    0.009500000000000
    0.001830000000000    0.002630000000000    0.007500000000000
    0.001630000000000    0.002080000000000    0.006000000000000
    0.001450000000000    0.001650000000000    0.004800000000000
    0.001290000000000    0.001310000000000    0.003700000000000
    0.001150000000000    0.001040000000000    0.003200000000000
    0.001020000000000    0.000820000000000    0.002500000000000
    0.000910000000000    0.000650000000000    0.002000000000000
    0.000810000000000    0.000520000000000    0.001600000000000
    0.000720000000000    0.000410000000000    0.001200000000000
    0.000640000000000    0.000330000000000    0.000920000000000
    0.000570000000000    0.000260000000000    0.000730000000000
    0.000510000000000    0.000200000000000    0.000580000000000
    0.000450000000000    0.000160000000000    0.000460000000000
    0.000400000000000    0.000130000000000    0.000370000000000
    0.000360000000000    0.000100000000000    0.000290000000000
    0.000320000000000    0.000080000000000    0.000230000000000
    0.000290000000000    0.000060000000000    0.000180000000000
    0.000250000000000    0.000050000000000    0.000150000000000
    0.000230000000000    0.000040000000000    0.000110000000000
    0.000200000000000    0.000030000000000    0.000090000000000
    0.000180000000000    0.000030000000000    0.000070000000000
    0.000160000000000    0.000020000000000    0.000060000000000
    0.000140000000000    0.000020000000000    0.000050000000000
    0.000130000000000    0.000010000000000    0.000040000000000
    0.000110000000000    0.100000000000000    0.000030000000000
    0.000100000000000    0.000010000000000    0.000020000000000
    0.000090000000000    0.000010000000000    0.000020000000000
    0.000080000000000    0.000010000000000    0.000010000000000
    0.000070000000000                    0    0.000010000000000
    0.000060000000000                    0    0.000010000000000
    0.000060000000000                    0    0.000010000000000
    0.000050000000000                    0    0.000010000000000

 Column 4
```

```
    0.000160000000000
    0.000200000000000
    0.000250000000000
    0.000320000000000
    0.001400000000000
    0.001500000000000
    0.001630000000000
    0.000800000000000
    0.001010000000000
    0.001270000000000
    0.001700000000000
    0.002030000000000
    0.002560000000000
    0.003230000000000
    0.004070000000000
    0.005130000000000
    0.006490000000000
    0.008170000000000
    0.010300000000000
    0.012900000000000
    0.016340000000000
    0.020730000000000
    0.026150000000000
    0.032690000000000
    0.041460000000000
    0.051500000000000
    0.056400000000000
    0.085000000000000
    0.106200000000000
    0.130700000000000
    0.170000000000000
    0.212500000000000
    0.265600000000000
    0.333300000000000
    0.425000000000000
    0.531200000000000
    0.669300000000000
    0.845800000000000
    1.069000000000000
    1.338000000000000
    1.700000000000000
    2.152000000000000
    2.696000000000000
    3.400000000000000
    4.250000000000000
    5.312000000000000
    6.800000000000000
    8.500000000000000

M = [data(:,1) data(:,4)];
fac(M)
fac(M)
   -0.334914704410231

disp('Aqui va la fig1')
```
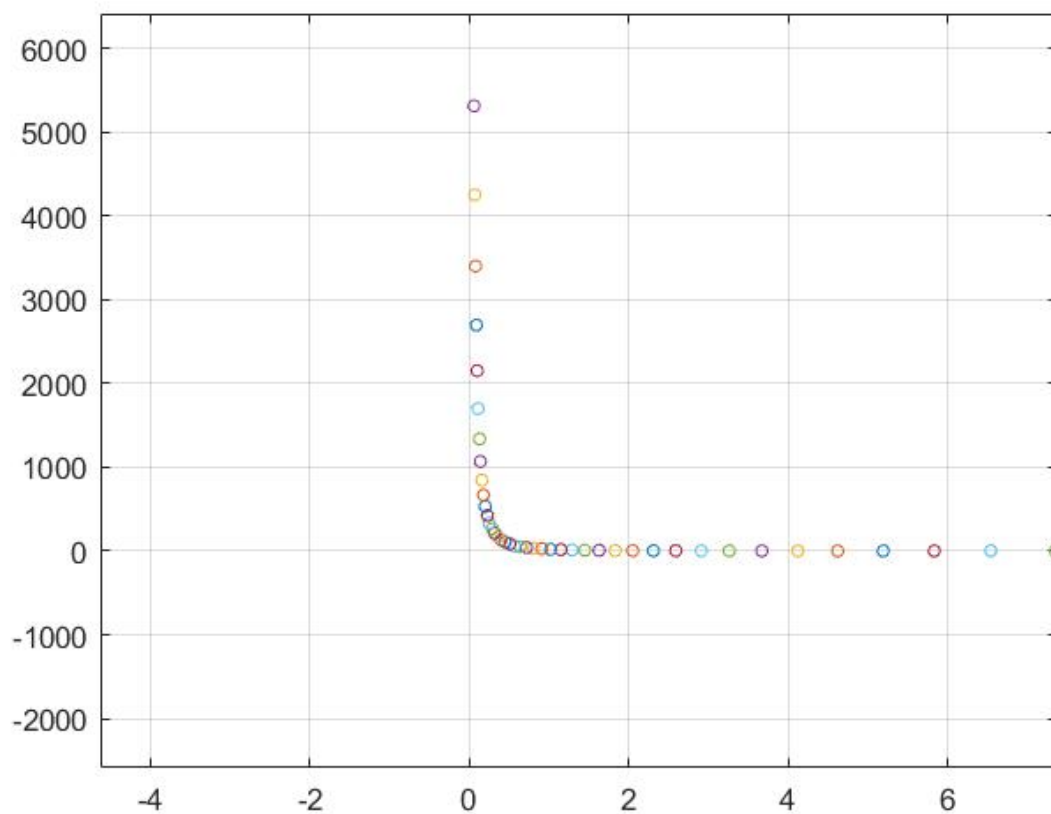
Aqui va la fig1
fac(M,3)
fac(M,m)
Ajuste Exponencial

A =

   1.0e+02 *

   0.480000000000000   1.064400000000000
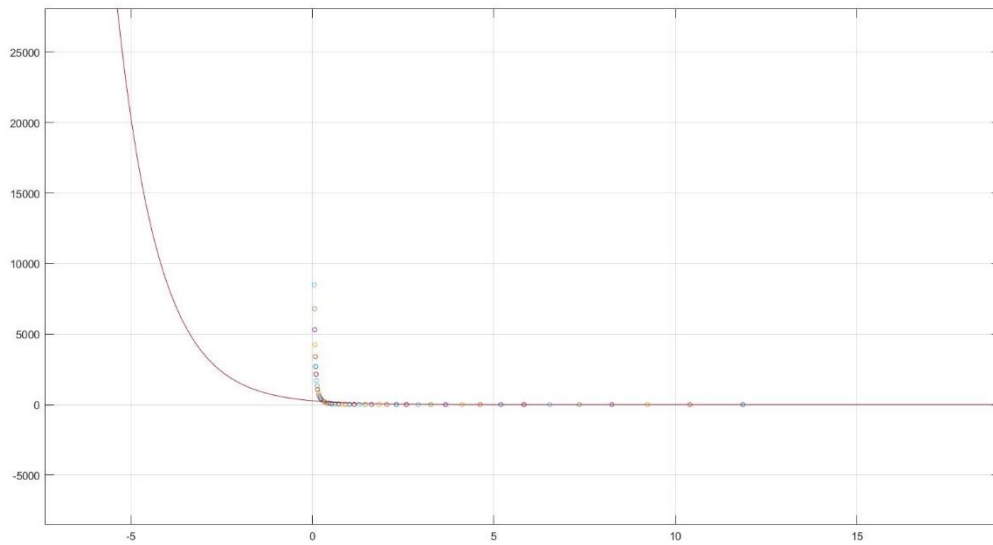   1.064400000000000   6.630363999999997

B =

   1.0e+02 *

   1.763757912329286
   0.217152154518924
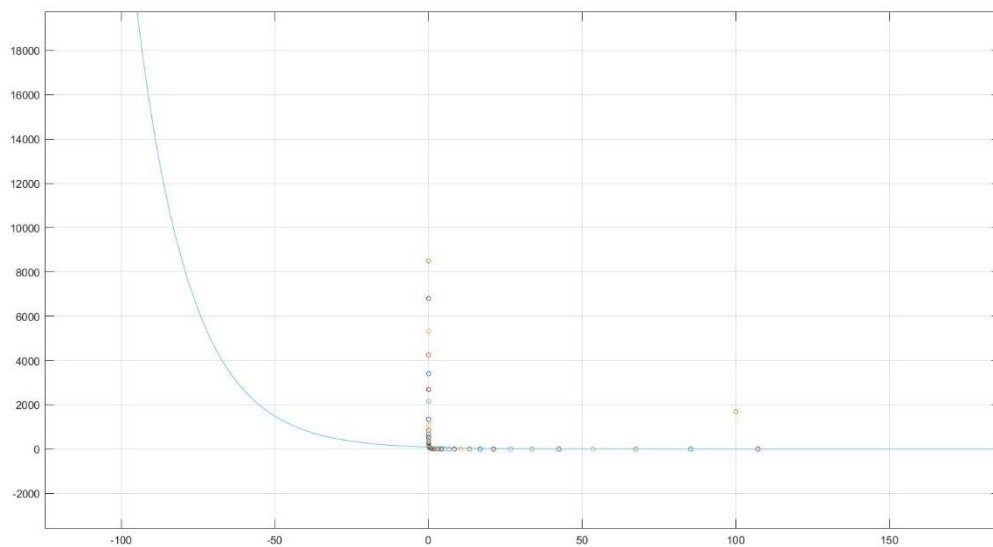

z =

   5.592831378555232
  -0.865089392500211

(4723409678356775*exp(-
(7792032531412239*x)/9007199254740992))/17592186044416

```
M = [data(:,2) data(:,4)];
fac(M)
fac(M)
  -0.156814165857852

disp('Aqui va la fig3')
Aqui va la fig3
```



```
fac(M,3)
fac(M,m)
Ajuste Exponencial

A =

   1.0e+04 *

   0.004800000000000   0.061828000000000
   0.061828000000000   4.102090919999999
```
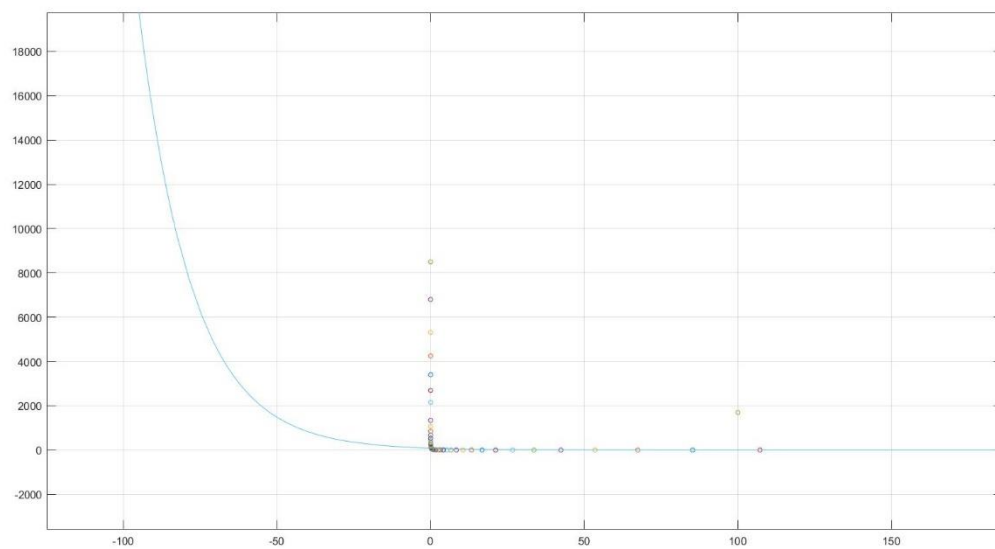
```
B =

   1.0e+02 *

   1.763757912329286
   3.651634059162800


z =

   4.417453946013890
  -0.057679365620331

(5832512434595535*exp(-
(8312472624470011*x)/144115188075855872))/70368744177664
```
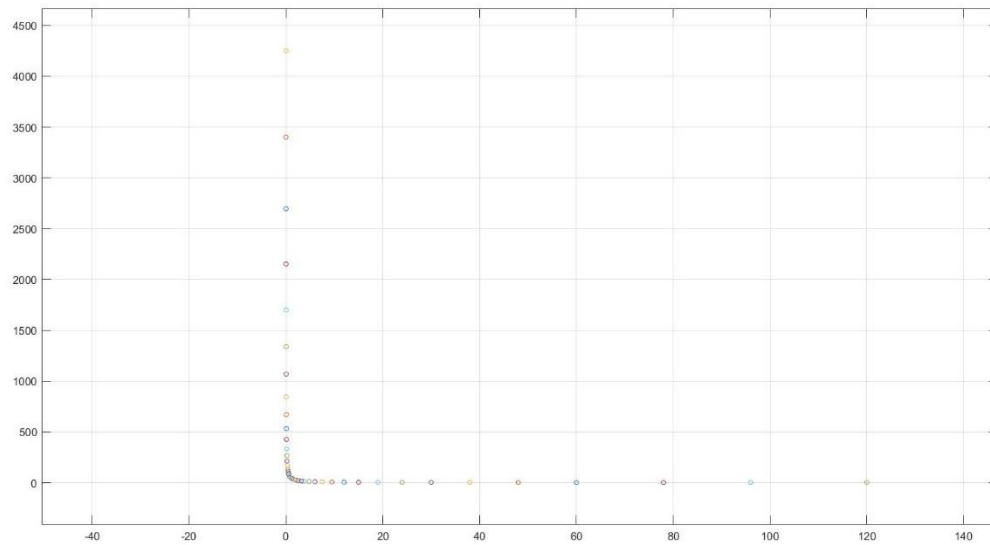


```
M = [data(:,3) data(:,4)];
fac(M)
fac(M)
  -0.218962349497221
```

```
fac(M,3)
fac(M,m)
Ajuste Exponencial

A =

   1.0e+05 *

   0.000480000000000   0.014854500000000
   0.014854500000000   2.574610111000000


B =

   1.0e+03 *

   0.176375791232929
  -1.089085342785370


z =

   4.632552999253917
  -0.030958129005527

(3616113135601029*exp(-
(2230768292054033*x)/72057594037927936))/35184372088832

disp('Aqui va la fig6')
Aqui va la fig6
```
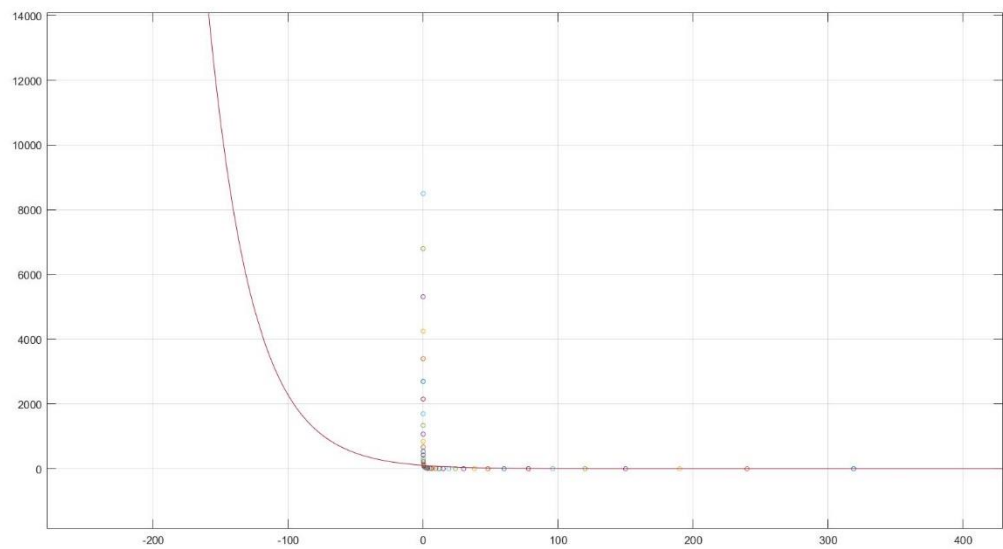
diary off