"MATLAB" has a built-in function 'fit';

Now, using that function. we can check whether a dataset obeys single-exponential or bi-exponential model.
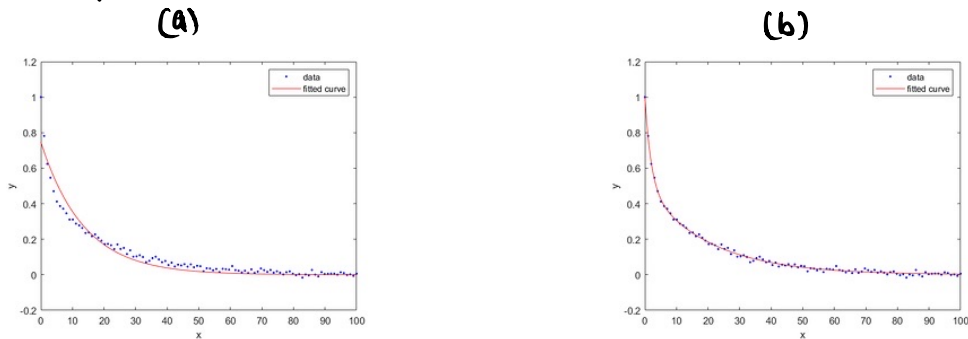
(a)

(b)

Fig-1: a) plot for data_1.csv using single-exponential
b) plot for data_1.csv using bi-exponential.

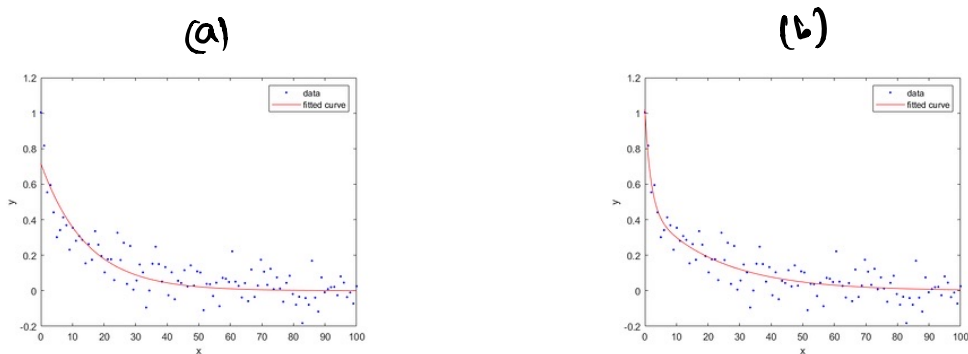from Fig-1. we can say that data_1.csv agrees more with the bi-exponential model

(a)

(b)

Fig-2: a) plot for data_2.cvs using single exponential
b) plot for data_2.cvs using bi-exponential.

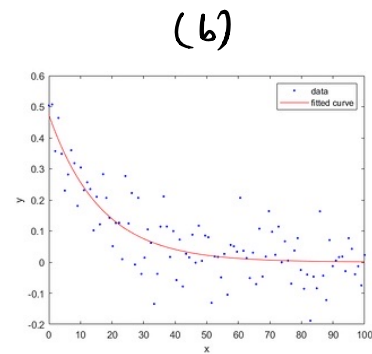from Fig-2, we can say that data_2.cvs agrees more with the bi-exponential method.
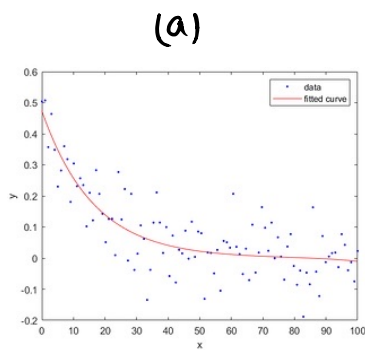
(a)   (b)

fig-3:   (a) plot for data-3. cvs using single exponential
         (b) plot for data-3. cvs using bi-exponential.

In case of fig.-3, there is not much of difference
in the single-exponential model response (a) and the
bi-exponential model response (b). But, it looks like
data-3. cvs agree more with single-exponential
method.