Project 2

Q1.

Write a computer program that finds the least-squares estimates of the coefficients in the following models.

a.
$$y = ax^2 + bx + c$$

b.
$$y = ax^n$$

Q2.

Write a computer program that uses Equations (3.4) and the appropriate transformed data to estimate the parameters of the following models.

a.
$$y = bx^n$$

b.
$$y = be^{ax}$$

$$\mathbf{c.} \ \ y = a \ln x + b$$

d.
$$y = ax^2$$

e.
$$y = ax^3$$

Q3.

Try to locate the trajectory of MU5735 using model fitting techniques and predict the source of this air crash.