Home work No 4- Fibonacci bracketing of extremum of unimodal function

Please write a code for finding the unimodal function extremum using

Fibonacci numbers bracketing algorithm in an interval.

Use the function f (x)= $x^2 - 6x + 2$ in the interval

$x_1 = 3 + \sqrt{7}$

$x_2 = 3 - \sqrt{7}$

for accuracies:

$$\varepsilon = \frac{1}{F_N} = 10^{-1}, 10^{-2}$$

Comment on the differences between the 2 cases.

Use the FORTRAN code provided on the web or better, write your own code.