E. Write down the outputs of sum(abs(S-s) < 10^-6)
       1. S=[1 2 3]; s=2;
       2. S=[1 2 3]; s=2+eps;
       3. S=[1 2 3]; s=2+0.02; d. S=[ ]; s=2;

F. Write down the outputs of sum(abs(S-s) < 10^-6) == 0
       1. S=[1 2 3]; s=2;
       2. S=[1 2 3]; s=2+eps;
       3. S=[1 2 3]; s=2+0.02; d. S=[ ]; s=2;

G. Explain the meaning of sum(abs(S-s) < 10^-6) == 0. Could you give an equivalent instruction for the same calculation purpose?

H. Draw a flow chart to find multiple roots of a given function. Write a Matlab script to find multiple roots of a given function.

J. Draw a for-loop flow chart to evaluate the following series, and write a Matlab function to implement your flow chart

$$S_N = \sum_{n=1}^{N} \left(\left\lfloor \frac{n^2}{5} \right\rfloor + \left\lceil \frac{2n}{3} \right\rceil \right)$$

$$a_n = a_{n-1} + a_{n-2}, \quad n \geq 2$$

$$a_0 = a_1 = 1$$