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Please select the task you want to perform: 1
Function expression: f(x) = x^10-1
Lower Guess xl = 0
Upper Guess xu = 1.3
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 2
Function expression: f(x) = x^10-1
Lower Guess xl = 0
Upper Guess xu = 1.3
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 3
Function expression: f(x) = x^10-1
Initial Guess xr = 0.5
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 4
Function expression: f(x) = exp(-x)-x
Derivative expression: df(x) = -exp(-x)-1
Initial Guess xr = 0.5
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 5
Function expression: f(x) = exp(-x)-x
Initial Guess xrold = 0.3
Initial Guess xr = 0.5
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 6
Coefficient Matrix A = [0 2 5; 2 1 1; 3 1 0]
Right Hand Side Vector b = [1 1 2]
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 7
Coefficient Matrix A = [3 -0.1 -0.2;
    0.1 7 -0.3;
    0.3 -0.2 10]
Right Hand Side Vector b = [7.85 -19.3 71.4]
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 8
Coefficient Matrix A = [-1 3 5;
    -2 4 -5;
    0 2 -1]
Right Hand Side Vector b = [7 -3 1]
Do you want to perform another task? [Y/N]y
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Please select the task you want to perform: 9
Coefficient Matrix A = [3 -0.1 -0.2;
    0.1 7 -0.3;
    0.3 -0.2 10]
Right Hand Side Vector b = [7.85 -19.3 71.4]
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 10
Coefficient Matrix A = [0.8 -0.4 0;
    -0.4 0.8 -0.4;
    0 -0.4 0.8]
Right Hand Side Vector b = [41 25 105]
Do you want to enter your desired relative error (es)? (default = 0.0001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 11
Independent Variable x = [0 2 4 6 9 11 12 15 17 19]
Dependent Variable y = [5 6 7 6 9 8 8 10 12 12]
Do you want to display the Correlation Coefficient? [Y/N]y
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 12
Independent Variable x = [10 20 30 40 50 60 70 80]
Dependent Variable y = [25 70 380 550 610 1220 830 1450]
Do you want to plot x vs. y and y_expected? [Y/N]y
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 13
Independent Variable x = [0.4 0.8 1.2 1.6 2 2.3]
Dependent Variable y = [800 985 1490 1950 2850 3600]
Do you want to plot x vs. y and y_expected? [Y/N]y
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 14
Independent Variable x = [0 1 2.5 3 4.5 5 6]
Dependent Variable y = [2 5.4375 7.3516 7.5625 8.4453 9.1875 12]
Value of independent variable at which interpolation is calculated xx = 3.5
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 15
Independent Variable x = [3 4 2.5 5]
Dependent Variable y = [7 3 6.5 1]
Value of independent variable at which interpolation is calculated xx = 3.4
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 16
x = [2.5 3 4 5]
y = [6.5 7 3 1]
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 17
Function expression: f(x) = log(x)
Lower limit of x-axis: Lower Limit = 4
Upper limit of x-axis: Upper Limit = 5.2
Number of Segments = 6
Do you want to plot the function with the area under the curve? [Y/N]y
Do you want to perform another task? [Y/N]y
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Please select the task you want to perform: 18
Function expression: f(x) = sin(x)
Lower limit of x-axis: Lower Limit = 0
Upper limit of x-axis: Upper Limit = 10
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 19
ODE expression: dydt = y.*t.^3-1.5*y
Initial Value = 0
Final Value = 1
Initial value of dependent variable = 1
Step Size h = 0.25
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 20
ODE expression: dydt = y.*t.^3-1.5*y
Initial Value = 0
Final Value = 1
Initial value of dependent variable = 1
Step Size h = 0.25
Do you want to enter your desired relative error (es)? (default = 0.001%) [Y/N]n
Do you want to enter your maximum allowable iterations (maxit)? (default = 50) [Y/N]n
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 21
ODE expression: dydt = y.*t.^3-1.5*y
Initial Value = 0
Final Value = 1
Initial value of dependent variable = 1
Step Size h = 0.25
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 22
ODE expression: dydt = y.*t.^3-1.5*y
Initial Value = 0
Final Value = 1
Initial value of dependent variable = 1
Step Size h = 0.25
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 23
Function expression: f(x) = sin(x)
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 24
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 25
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 26
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 27
Do you want to perform another task? [Y/N]y
Please select the task you want to perform: 28
Do you want to perform another task? [Y/N]n
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