Question 2

>> Muller

A) Give an equation in x: x^4-7.4*x^3+20.44*x^2-24.184*x+9.6448

Please select the method that you want to use:
1. Muller
2. Brainstow
Enter the number of method that you want to use: 1
Enter value of x0: -1
Enter value of x1: 0
Enter value of x2: 1
Enter the value of maximum error in %: 0.01
Maximum Iteration to be performed: 50
\n
Root of equation is 0.80002 and final error is 0.002359
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B) Give an equation in x: x^4-7.4*x^3+20.44*x^2-24.184*x+9.6448

Please select the method that you want to use:
1. Muller
2. Brainstow
Enter the number of method that you want to use: 1
Enter value of x0: 0
Enter value of x1: 1
Enter value of x2: 2
Enter the value of maximum error in %: 0.01
Maximum Iteration to be performed: 50
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Root of equation is 2.2 and final error is 2.4814e-05

>> Bairstrow

Give an equation in x: x^4-7.4*x^3+20.44*x^2-24.184*x+9.6448

Please select the method that you want to use:
1. Muller
2. Brainstow
Enter the number of method that you want to use: 2
Enter value of r: -4

Enter the value of s: 5
Enter the value of maximum error in %: 0.01
Maximum Iteration to be performed: 50
0.0000 0.0000 1.7599 -7.7437 9.6448

17.5296 13.9852 11.1035 8.6966 9.6448

values of r and s: 1.7045, -0.56818
Root of equation are:
0.4014 + 0.1460i
0.4014 - 0.1460i
0.4545 + 0.0000i
1.2500 + 0.0000i

>> part(b)
Give an equation in x: x^4-7.4*x^3+20.44*x^2-24.184*x+9.6448

Please select the method that you want to use:
1. Muller
2. Brainstow
Enter the number of method that you want to use: 2
Enter value of r: -2
Enter the value of s: 2
Enter the value of maximum error in %: 0.01
Maximum Iteration to be performed: 50
0.0000 0.0000 1.7600 -7.7440 9.6448

17.5284 13.9842 11.1028 8.6960 9.6448

values of r and s: 1.7045, -0.56818
Root of equation are:
0.4015 + 0.1460i
0.4015 - 0.1460i
0.4545 + 0.0000i
1.2500 + 0.0000i

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