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MATLAB example: basic_intro.m
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FOR Loop example:
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i = 1  
i = 2  
i = 3  
i = 4
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IF statement example:
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x is zero
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WHILE Loop example:
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iter 1 T_old = 4.0000000 T_new= 3.2291667 diff= -7.708333e-001  
iter 2 T_old = 3.2291667 T_new= 3.0158787 diff= -2.132880e-001  
iter 3 T_old = 3.0158787 T_new= 3.0000835 diff= -1.579526e-002  
iter 4 T_old = 3.0000835 T_new= 3.0000000 diff= -8.345298e-005  
iter 5 T_old = 3.0000000 T_new= 3.0000000 diff= -2.321510e-009
```

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Root search CONVERGED in 5 iterations
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