
M2.2 Function M-File

```
lambda = MS2P2([1e4, 1e4, 1e4],[1e-9, 1e-6]);
function [lambda] = MS2P2(R,C)
% MS2P2.m MATLAB Session 2, Program 2
% Function M-file determines characteristic roots of op-amp circuit
% INPUTS:      R = length - 3 vector of resistances
%              C = length - 2 vector of capacitances
% Outputs:     lambda = characteristic roots
% >> lambda22 =
%      1.0e+03 *
%      -0.1500 + 3.1587i
%      -0.1500 - 3.1587i

% Determine coefficients for characteristic equation:
a0 = 1;
a1 = (1/R (1) + 1/R (2) + 1/R (3)) /(C (2));
a2 = 1/(R(1) *R (2) *C(1) *C(2));
A = [a0 a1 a2];

% Determine characteristic roots:
lambda = roots (A);
end
```

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