```
function [y,n] = sigadd(x1,n1,x2,n2)
% Implements y(n) = x1(n) + x2(n)
% ----------------------------
% [y,n] = sigadd(x1,n1,x2,n2)
%   y = sum sequence over n, which includes n1 and n2
%  x1 = first sequence over n1
%  x2 = second sequence over n2 (n2 can be different from n1)
%
n = min(min(n1), min(n2)):max(max(n1), max(n2));  % duration of y(n)
y1 = zeros(1,length(n));
y2 = zeros(1,length(n)); % initialization
y1(ismember(n, n1)) = x1; % x1 with duration of y
y2(ismember(n, n2)) = x2; % x2 with duration of y
y = y1 + y2; % sequence addition
end

function [y,n] = sigmult(x1,n1,x2,n2)
% Implements y(n) = x1(n) * x2(n)
% ----------------------------
% [y,n] = sigmult(x1,n1,x2,n2)
% y = product sequence over n, which includes n1 and n2
% x1 = first sequence over n1
% x2 = second sequence over n2 (n2 can be different from n1)
%
n = min(min(n1), min(n2)):max(max(n1), max(n2)); % Duration of y(n)
y1 = zeros(1,length(n));
y2 = zeros(1,length(n));

[~, ind1] = ismember(n1, n); % Find the indices within n that correspond to n1
[~, ind2] = ismember(n2, n); % Find the indices within n that correspond to n2

y1(ind1) = x1; % Place x1 values in y1
y2(ind2) = x2; % Place x2 values in y2
y = y1 .* y2; % Element-wise multiplication
end

function [y,n] = sigshift(x,m,k)
% Implements y(n) = x(n - k)
% ----------------------------
% [y,n] = sigshift(x,m,k)
%
n = m + k;
y = x;
end

function [y,n] = sigfold(x,n)
% Implements y(n) = x(-n)
% ----------------------------
% [y,n] = sigfold(x,n)
%
y = fliplr(x);
```

```
n = -fliplr(n);
end

Not enough input arguments.

Error in Operations_on_sequences (line 9)
n = min(min(n1), min(n2)):max(max(n1), max(n2));  % duration of y(n)
```

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