```
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 = y1; % initialization
y1(find((n>=min(n1))&(n<=max(n1))==1))=x1; % x1 with duration of y
y2(find((n>=min(n2))&(n<=max(n2))==1))=x2; % x2 with duration of y
y = y1+y2; % sequence addition

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 = y1; %
y1(find((n<=min(n1))&(n<=max(n1))==1))=x1; % x1 with duration of y
y2(find((n>=min(n2))&(n<=max(n2))==1))=x2; % x2 with duration of y
y = y1*y2; % sequence multiplication

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

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

```
Not enough input arguments.

Error in Operations_on_sequences (line 10)
n = min(min(n1),min(n2)):max(max(n1),max(n2));  % duration of y(n)
```

Published with MATLAB® R2024a