```
function r = normrnd(mu,sigma,m,n);
%NORMRND Random matrices from normal distribution.
%   R = NORMRND(MU,SIGMA) returns a matrix of random numbers chosen
%   from the normal distribution with parameters MU and SIGMA.
%
%   The size of R is the common size of MU and SIGMA if both are matrices.
%   If either parameter is a scalar, the size of R is the size of the other
%   parameter. Alternatively, R = NORMRND(MU,SIGMA,M,N) returns an M by N
%   matrix.

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if nargin == 2
    [errorcode rows columns] = rndcheck(2,2,mu,sigma);
elseif nargin == 3
    [errorcode rows columns] = rndcheck(3,2,mu,sigma,m);
elseif nargin == 4
    [errorcode rows columns] = rndcheck(4,2,mu,sigma,m,n);
else
    error('Requires at least two input arguments.');
end

if errorcode > 0
    error('Size information is inconsistent.');
end

r = randn(rows,columns) .* sigma + mu;

% Fill in elements corresponding to illegal parameter values
if prod(size(sigma)) > 1
    r(sigma < 0) = NaN;
elseif sigma < 0
    r(:) = NaN;
end
```