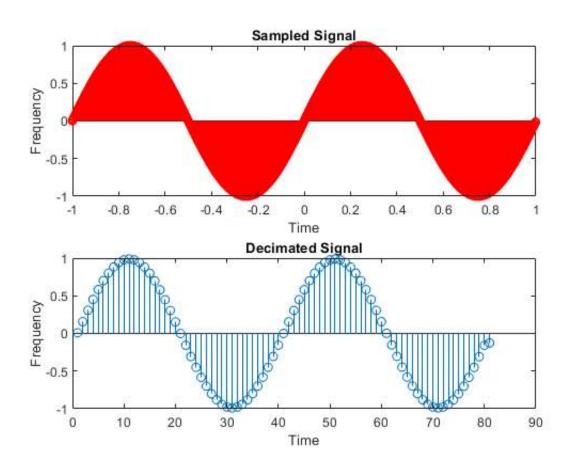
```
clc;
clear all;
close all;
t = (-1:(1/4000):1);
a = \sin(2*3.14*t);
y = decimate(a, 100);
\mbox{\ensuremath{\upsigma}} we need to use (a,4), but there is no noticeable difference
subplot(2,1,1);
stem(t,a,'r');
xlabel('Time');
ylabel('Frequency');
title('Sampled Signal');
subplot(2,1,2);
stem(y);
xlabel('Time');
ylabel('Frequency');
title('Decimated Signal');
```



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