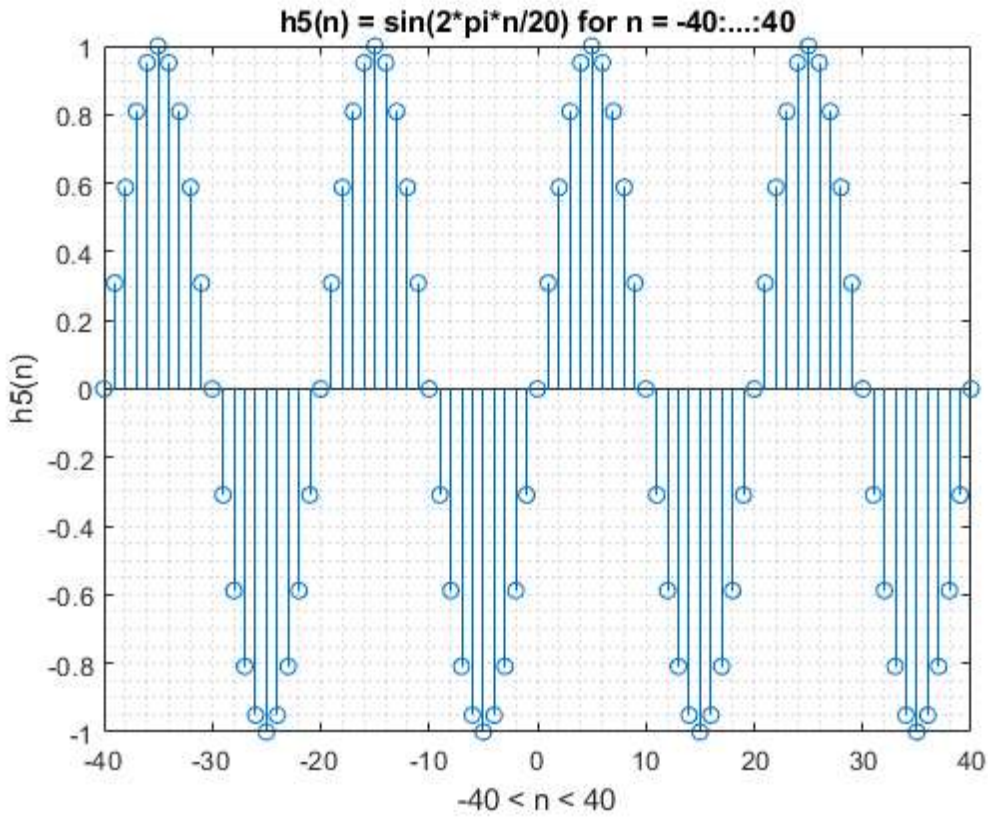
```
%Assignment 1
% Done by Mahmoud Yassin Mahmoud
% ID: 202113650
% Submitted To Dr. Wail A. Mousa
% Bism Allah and I will continue with
%(Q3)The sinusoidal sequence:
% h5(n) = sin(2*pi*n/20) for n = -40:...:40
% Is it a periodic signal? If yes, then what is its period?
%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
clc;
clear;
%.....................................
% difine n
 n= -40:40;
 %.........................................
%calculate sinusoidal
 h5 = sin(2*pi*n/20);
 %.........................................
 %ploting
 stem(n,h5)
   grid minor
   title('h5(n) = sin(2*pi*n/20) for n = -40:...:40')
   xlabel('-40 < n < 40')
   ylabel('h5(n)')
 % Periodicity
 fprintf('Signal is periodoc with fundamental period equals to 20\n');
```

```
Signal is periodoc with fundamental period equals to 20
```



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