Console

```
--> exec("notch.sce")

--> disp("enter the values of fo, fs and q(quality factor) in the fo.txt,fs.txt and q.txt file prov
ed");

 enter the values of fo, fs and q(quality factor) in the fo.txt,fs.txt and q.txt file provided

--> //reading the notch freq.ie fo from the user

-->fo=read('fo.txt',1,1)
 fo  =

   60.

--> //reading the signal freq. ie fs from the user

--> fs=read('fs.txt',1,1)
 fs  =

   300.

--> //reading the quality factor value ie q from user

--> q=read('q.txt',1,1)
 q  =

   35.

-->  //bw=bandwidth

--> bw=w0/q
 bw  =

    0.0114286

--> w0=fo/(fs/2)
 w0  =

   0.4

--> //generating linearspace vector which resembles to w0

-->   aw0=linspace(0,w0*2,3)
```

```
 aw0  =

  0.   0.4   0.8

--> //getting the difference between two consecutive elements of generated linspace ve

-->  d=aw0(1,2)-aw0(1,1)
 d  =

  0.4


--> xtitle("notch filter","normaised frequency(x rad/sample)","magnitude(dB)")

--> for x=aw0(1,1):w0/8:aw0($,$)
-->    if(x==w0)
-->       then
-->        continue
-->    else
-->       plot2d(x,bw,style=0)
-->
--> end
--> end

 Figure saved.
```