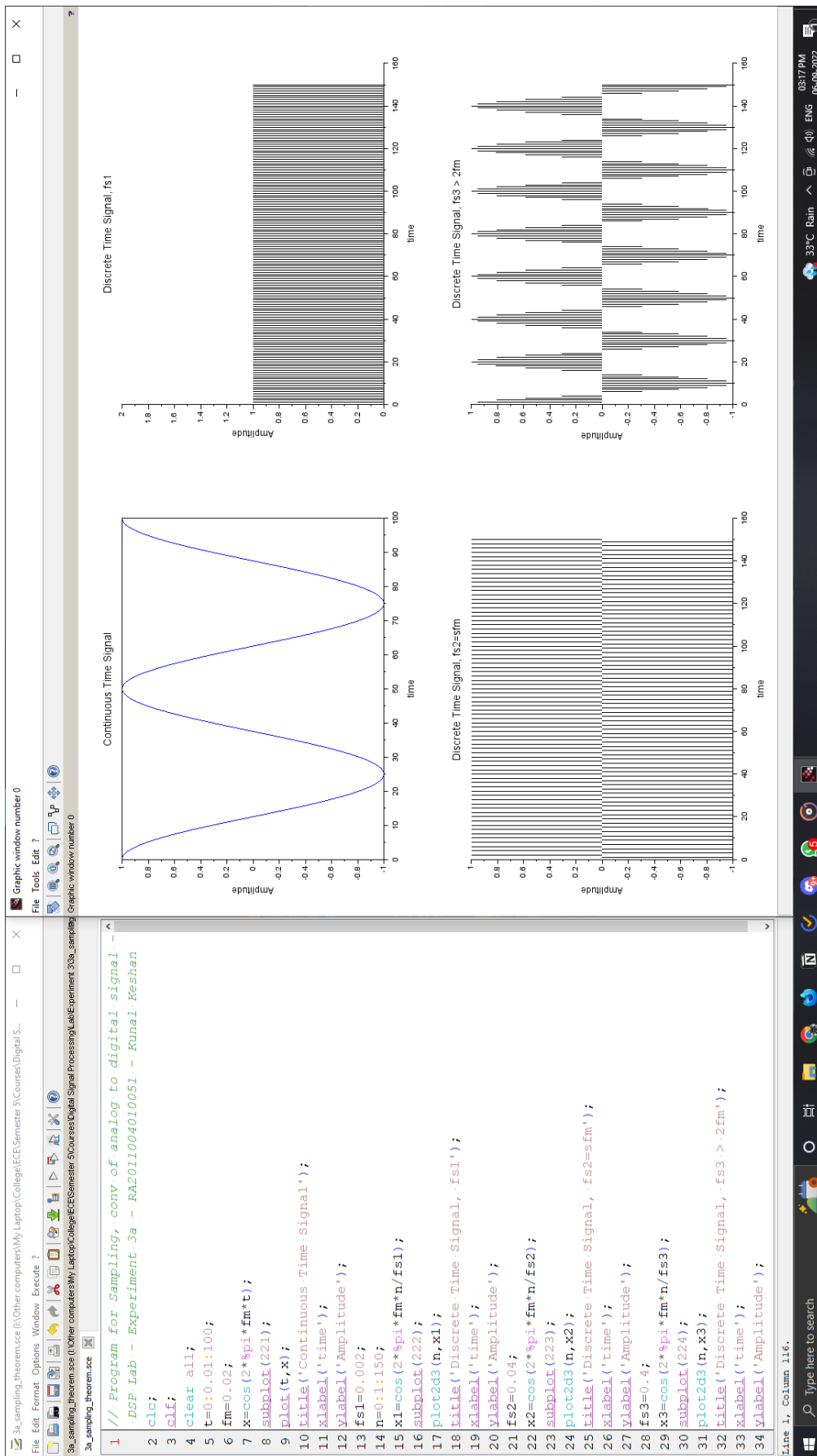


## DSP Experiment 3a Output



### 3b Aliasing and its effects Output

The screenshot displays the MATLAB Scilab 6.1.1 environment. The main window shows a script file named '3b\_aliasing\_and\_its\_effects.sce'. The script defines a function `aliasfrequency(f, s, sl)` and calls it with various parameters. The console window shows the execution of the script, including the function definition, the frequency of reconstructed signal, and the aliasing effect.

```

1 // Aliasing and Its Effect -- DSP Lab -- Experiment 3 -- RA20110040100
2 51 - Kunal Keshan
3 function [F]= aliasfrequency(f, s, sl)
4     if (s>2*f) then
5         disp('Aliasing not occurred');
6     else
7         disp('Aliasing Occured');
8     end
9     F = f/s;
10    for i = 1:100
11        if (abs(F)>0.5)
12            F = F-i;
13        end
14    end
15    fa = F*sl;
16    disp(fa, 'Frequency of Reconstructed Signal is');
17 endfunction
18 f=input('Enter the frequency');
19 s=240 // Sampling frequency
20 sl=s;
21 aliasfrequency(f, s);
22 s=140; // Sampling Frequency
23 sl=s;
24 aliasfrequency(f, s, sl);
25 s=90; // Sampling Frequency
26 sl=s;
27 aliasfrequency(f, s, sl);
28 sl=s;
29 aliasfrequency(f, s, sl);

```

The console output shows the following messages:

```

--> exec('I:\Other computers\My Laptop\College\ECE\Semester 5\Course
--> exec('I:\Other computers\My Laptop\College\ECE\Semester 5\Course
Warning : redefining function: aliasfrequency . Use funcpro
--> exec('I:\Other computers\My Laptop\College\ECE\Semester 5\Course
Enter the frequency100
"Aliasing not occurred"
100.
"Frequency of Reconstructed Signal is"
"Aliasing Occured"
-40.
"Frequency of Reconstructed Signal is"
"Aliasing Occured"
10.000000
"Frequency of Reconstructed Signal is"
"Aliasing Occured"
10.000000
"Frequency of Reconstructed Signal is"
-->

```

The Variable Browser shows the following variables:

Name	Value	Type	Vis...	Me...
ans	0.1111	Double	local	216.8
f	100	Double	local	216.8
fa	0.4167	Double	local	216.8
sl	0.002	Double	local	216.8
s	0.04	Double	local	216.8
sl	0.4	Double	local	216.8
n	1x151	Double	local	1.418
s	90	Double	local	216.8
sl	90	Double	local	216.8
t	1x10...	Double	local	80.218
x	1x10...	Double	local	80.218
x1	1x151	Double	local	1.418
x2	1x151	Double	local	1.418
x3	1x151	Double	local	1.418

The Command History shows the following commands:

```

// -- 22/09/2022 17:20:39 -- //
// -- 22/09/2022 17:20:39 -- //
// -- 22/09/2022 17:20:39 -- //
// -- 02/09/2022 17:41:14 -- //
// -- 06/09/2022 15:11:05 -- //
100

```

The News feed shows the following message:

**Scilab 6.1.1 has been released!!!**

Dear fellow users,

We have the pleasure to announce the release of the new version of Scilab. Check out the new features and find more details about Scilab 6.1.1.

Wishing you a great journey in Scilab!

Scilab Team

<https://www.scilab.org/news/scilab-6.1.1-release>

