Editor - C:\Users\DELL\OneDrive\Desktop\Untitled.m

EDITOR PUBLISH VIEW

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Tabs Position | Shrink Tabs to Fit | Alphabetize — DOCUMENT TABS

None | Left/Right | Top/Bottom — SPLIT DOCUMENT

Expand | Collapse | Expand All | Collapse All — CODE FOLDING

Highlight current line | Show line numbers | Enable datatips while editing — DISPLAY

Untitled.m

```
%18EX20030 UTKARSH JAISWAL
clear all
close all
clc
fc=[0.00097112, -0.00102152, 0.00906965, 0.01404316, 0.09012, 0.30171582, 0.99627084, 1.3690832, -2.99681171,1.65463068, -0.59399277, 0.22329813, -0.10119309, 0.05186135, -0.027486
abs=[-0.980685 -0.771995 -0.563305 -0.354615 -0.145925 0.062765 0.271455 0.480145 0.688835 0.897525 1.106215 1.314905,1.523595 1.732285 1.940975 2.149665 2.358355 2.567045 2.775735
s=[1.5 2 3 4 6 8 10 15 20 25 30 40 50 60 80 100 120 140 160 180 200 250 300 350 400 500 600 800 1000];
n = input('Enter the number of layer');
ns=length(s);
r=[ ];
h=[ ];
for i=1:n;
 r(i)=input('Enter resistivity from top to bottom');
end
for i=1:n-1;
 h(i)=input('Enter thickness from top to bottom');
end
rt=[];
rhoa=[];
m=length(fc);
for i=1:ns;
for j=1:m;
 lam=10^(abs(j)-log10(s(i)));
 T=r(n);
 for nu=n-1:-1:1;
 T=(T+r(nu)*tanh(lam*h(nu)))/(1+(T*tanh(lam*h(nu)))/r(nu));
 end
 rt(j)=T;
end
 rho=0;
for k=1:m;
 rho=rho+fc(k)*rt(k);
```

UTF-8 | script | Ln 14 | Col 4

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100% ENG 14:36 10-11-2021

Editor - C:\Users\DELL\OneDrive\Desktop\Untitled.m

EDITOR | PUBLISH | VIEW

Single | Left/Right | Top/Bottom | Custom — TILES
Tabs Position | Shrink Tabs to Fit | Alphabetize — DOCUMENT TABS
None | Left/Right | Top/Bottom — SPLIT DOCUMENT
Expand | Collapse | Expand All | Collapse All — CODE FOLDING
Highlight current line | Show line numbers | Enable datatips while editing — DISPLAY

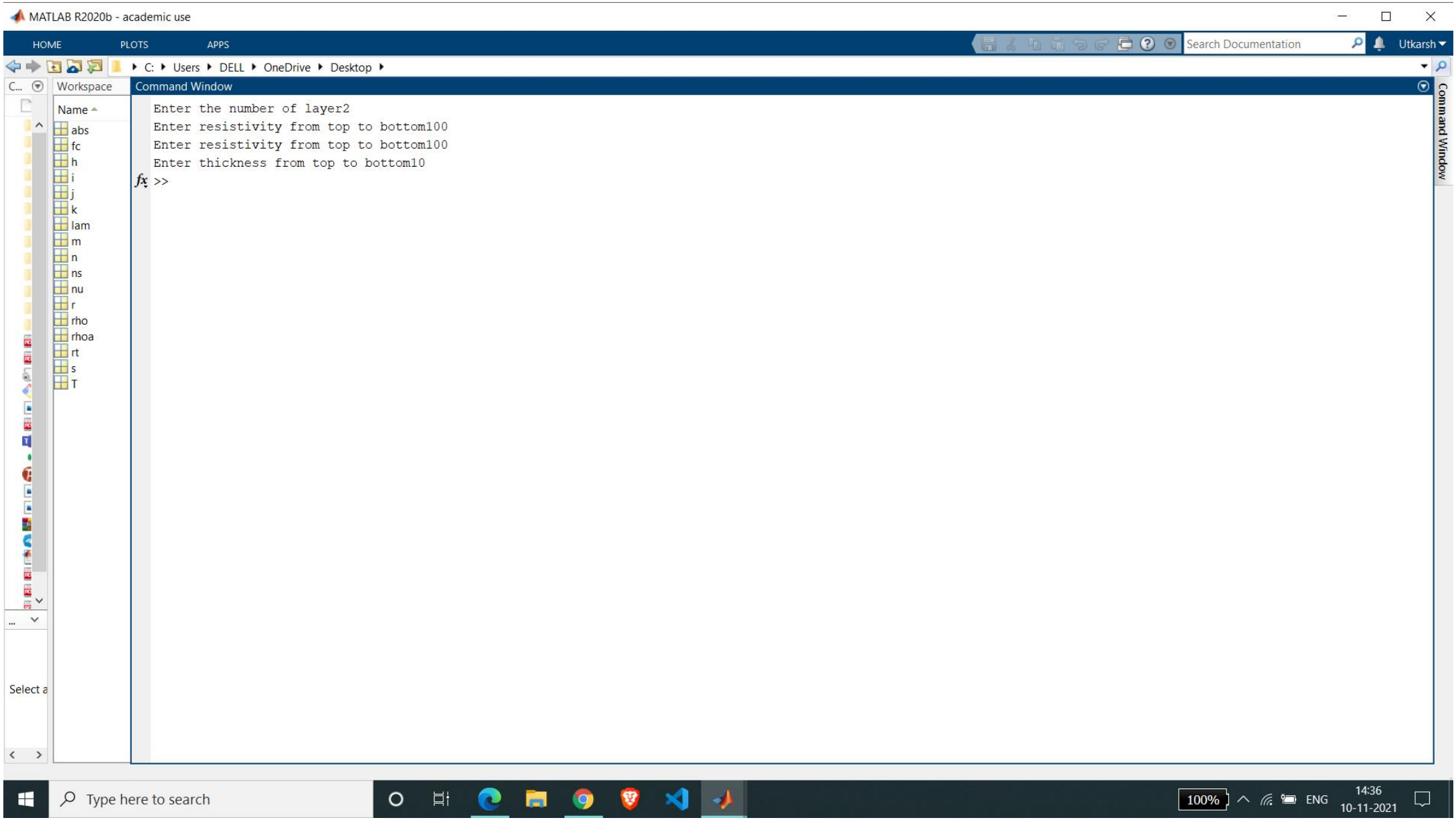
Untitled.m

```
7 -   s=[1.5 2 3 4 6 8 10 15 20 25 30 40 50 60 80 100 120 140 160 180 200 250 300 350 400 500 600 800 1000];
8 -   n = input('Enter the number of layer');
9 -   ns=length(s);
10 -  r=[ ];
11 -  h=[ ];
12 -  for i=1:n;
13 -   r(i)=input('Enter resistivity from top to bottom');
14 -  end
15 -  for i=1:n-1;
16 -   h(i)=input('Enter thickness from top to bottom');
17 -  end
18 -  rt=[];
19 -  rhoa=[];
20 -  m=length(fc);
21 -  for i=1:ns;
22 -  for j=1:m;
23 -   lam=10^(abs(j)-log10(s(i)));
24 -   T=r(n);
25 -   for nu=n-1:-1:1;
26 -   T=(T+r(nu)*tanh(lam*h(nu)))/(1+(T*tanh(lam*h(nu)))/r(nu));
27 -   end
28 -   rt(j)=T;
29 -  end
30 -   rho=0;
31 -  for k=1:m;
32 -   rho=rho+fc(k)*rt(k);
33 -  end
34 -   rhoa(i)=rho;
35 -  end
36 -  loglog(s,rhoa)
37 -  xlabel('s')
38 -  ylabel('Rhoa')
```

UTF-8 | script | Ln 14 | Col 4

Type here to search

100% | ENG | 14:36 | 10-11-2021


MATLAB R2020b - academic use
HOME
PLOTS
APPS
Search Documentation
Utkarsh
C: Users DELL OneDrive Desktop
Workspace
Name
abs
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h
i
j
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m
n
ns
nu
r
rho
rhoa
rt
s
T
Command Window
Enter the number of layer2
Enter resistivity from top to bottom100
Enter resistivity from top to bottom100
Enter thickness from top to bottom10
>>
Command Window
Select a
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ENG
14:36
10-11-2021

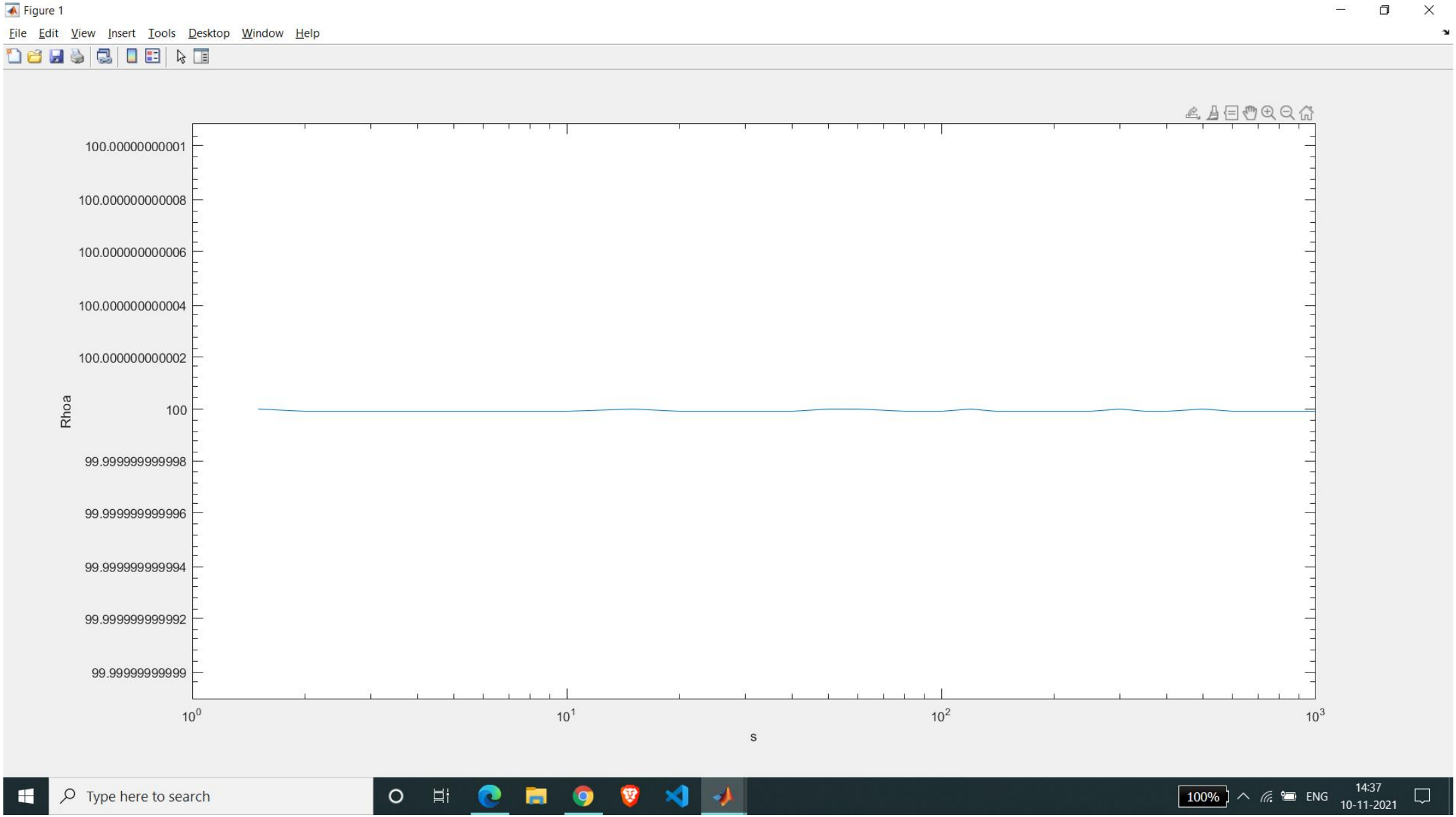
Figure 1
File Edit View Insert Tools Desktop Window Help
100.00000000001
100.000000000008
100.000000000006
100.000000000004
100.000000000002
100
99.999999999998
99.999999999996
99.999999999994
99.999999999992
99.99999999999
Rhoa
10^0
10^1
10^2
10^3
s
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ENG
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10-11-2021

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HOME PLOTS APPS

Search Documentation

Utkarsh

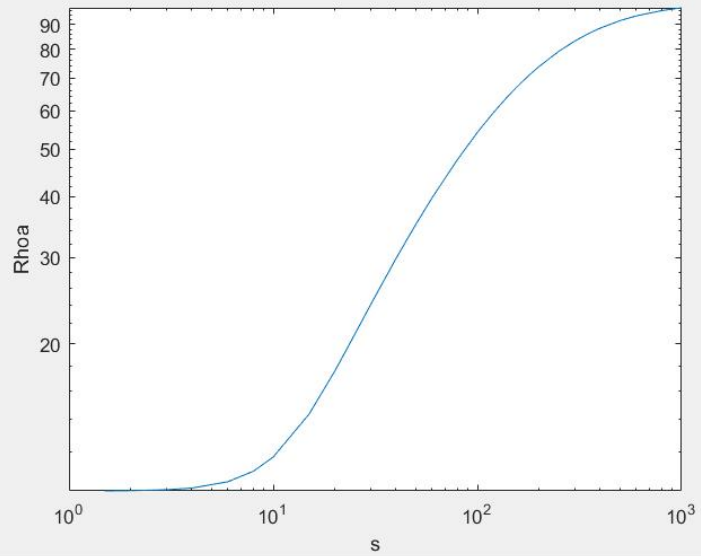
C: ▸ Users ▸ DELL ▸ OneDrive ▸ Desktop ▸

Command Window

```
Enter the number of layer2
Enter resistivity from top to bottom10
Enter resistivity from top to bottom100
Enter thickness from top to bottom10
>>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

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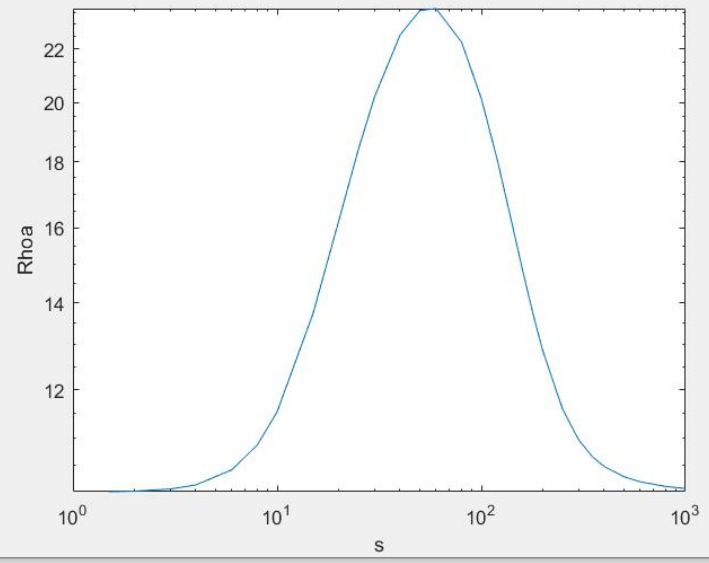
Command Window

```
Enter the number of layer3
Enter resistivity from top to bottom10
Enter resistivity from top to bottom100
Enter resistivity from top to bottom10
Enter thickness from top to bottom10
Enter thickness from top to bottom10
fx >>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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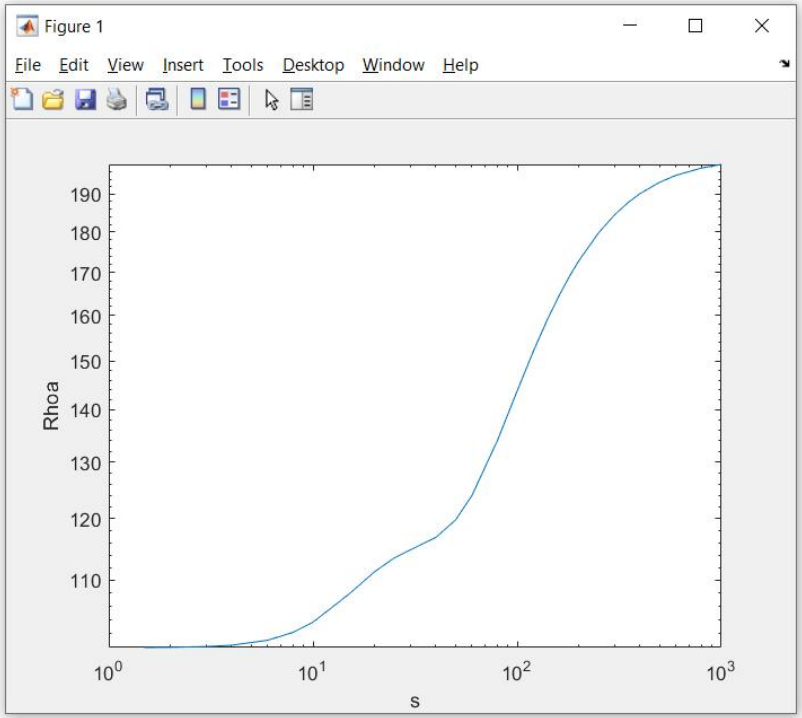
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
>>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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EDITOR PUBLISH VIEW

New Open Save Find Files Compare Print — FILE
Go To Find — NAVIGATE
Insert Comment Indent — EDIT
Breakpoints — BREAKPOINTS
Run Run and Advance Run Section Advance Run and Time — RUN

Untitled1.m*

```
%18EX20030 UTKARSH JAISWAL
clear all
close all
clc
fc=[0.00097112 -0.00102152 0.00906965 0.01404316 0.09012 0.30171582 0.99627084 1.3690832 -2.99681171 1.65463068 -0.59399277 0.22329813 -0.10119309 0.05186135 -0.02748647 0.01384932
abs=[-0.980685 -0.771995 -0.563305 -0.354615 -0.145925 0.062765 0.271455 0.480145 0.688835 0.897525 1.106215 1.314905 1.523595 1.732285 1.940975 2.149665 2.358355 2.567045 2.775735
s=[1.5 2 3 4 6 8 10 15 20 25 30 40 50 60 80 100 120 140 160 180 200 250 300 350 400 500 600 800 1000 ];
n = input('Enter the number of layer');
ns=length(s);
r=[ ];
h=[ ];
for i=1:n;
r(i)=input('Enter resistivity from top to bottom');
end
for i=1:n-1;
h(i)=input('Enter thickness from top to bottom');
end
rt=[];
rhoa=[];
m=length(fc);
for i=1:ns;
for j=1:m;
lam=10^(abs(j)-log10(s(i)));
T=r(n);
for nu=n-1:-1:1;
T=(T+r(nu)*tanh(lam*h(nu)))/(1+(T*tanh(lam*h(nu)))/r(nu));
end
rt(j)=T;
end
rho=0;
for k=1:m;
rho=rho+fc(k)*rt(k);
```

UTF-8 script Ln 55 Col 46

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EDITOR PUBLISH VIEW

New Open Save Find Files Compare Print — FILE
Go To Find — NAVIGATE
Insert Comment Indent — EDIT
Breakpoints — BREAKPOINTS
Run Run and Advance Run Section Advance Run and Time — RUN

Untitled1.m*

```
25 -  for nu=n-1:-1:1;
26 -  T=(T+r(nu)*tanh(lam*h(nu)))/(1+(T*tanh(lam*h(nu)))/r(nu));
27 -  end
28 -  rt(j)=T;
29 -  end
30 -  rho=0;
31 -  for k=1:m;
32 -  rho=rho+fc(k)*rt(k);
33 -  end
34 -  rhoa(i)=rho;
35 -  end
36 -  loglog(s,rhoa)
37 -  hold on
38 -  h(1)=h(1)*1.1;
39 -  for i=1:ns;
40 -  for j=1:m;
41 -  lam=10^(abs(j)-log10(s(i)));
42 -  T=r(n);
43 -  for nu=n-1:-1:1;
44 -  T=(T+r(nu)*tanh(lam*h(nu)))/(1+(T*tanh(lam*h(nu)))/r(nu));
45 -  end
46 -  rt(j)=T;
47 -  end
48 -  rho=0;
49 -  for k=1:m;
50 -  rho=rho+fc(k)*rt(k);
51 -  end
52 -  rhoa(i)=rho;
53 -  end
54 -  loglog(s,rhoa)
55 -  legend ("initial model", "changed parameter")
56
```

UTF-8 script Ln 55 Col 46

Type here to search

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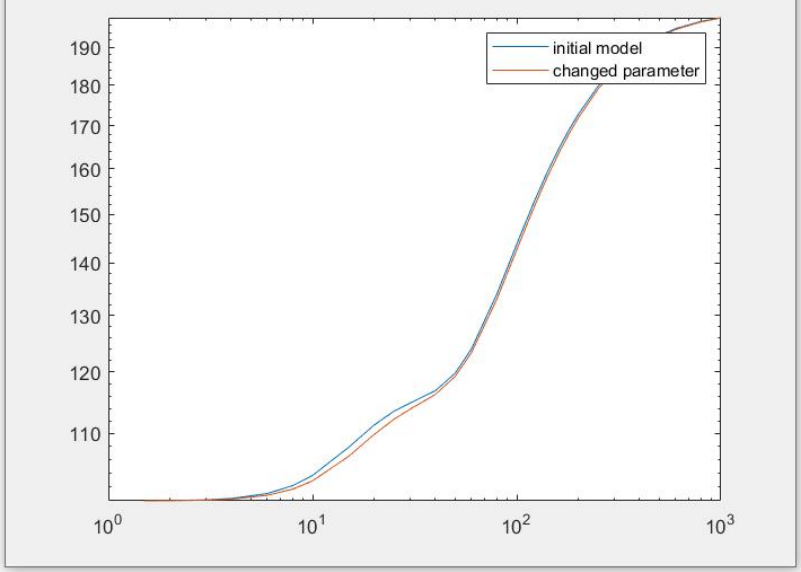
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
fx >>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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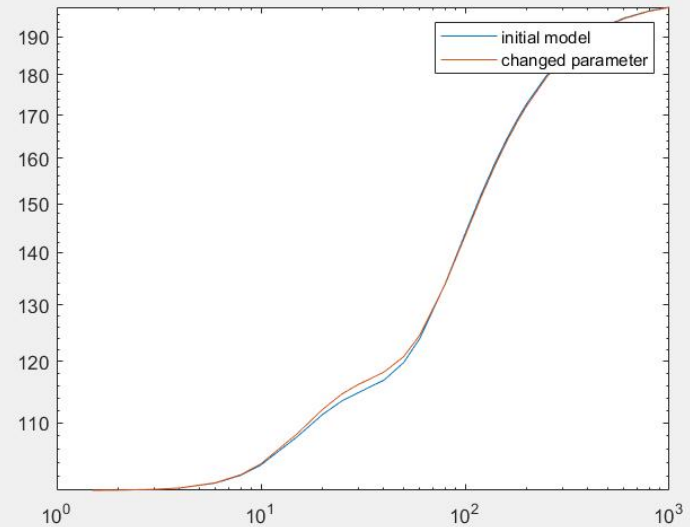
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
fx >>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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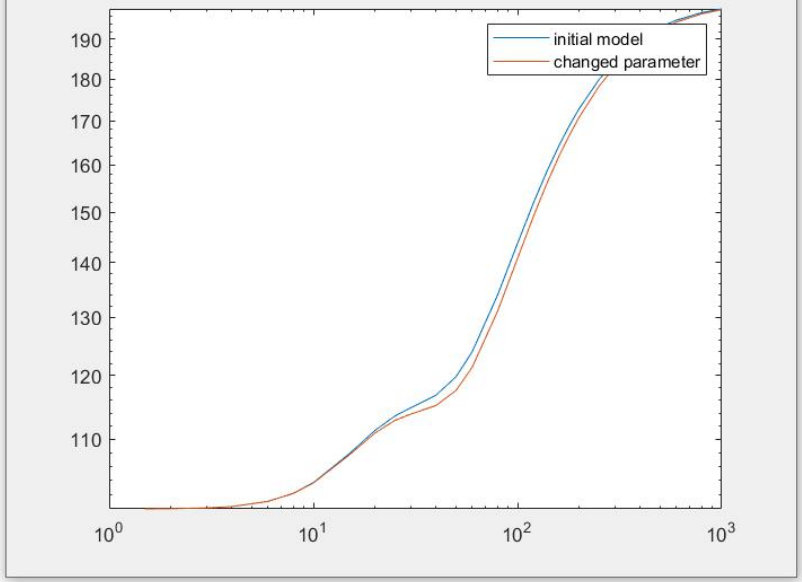
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
>>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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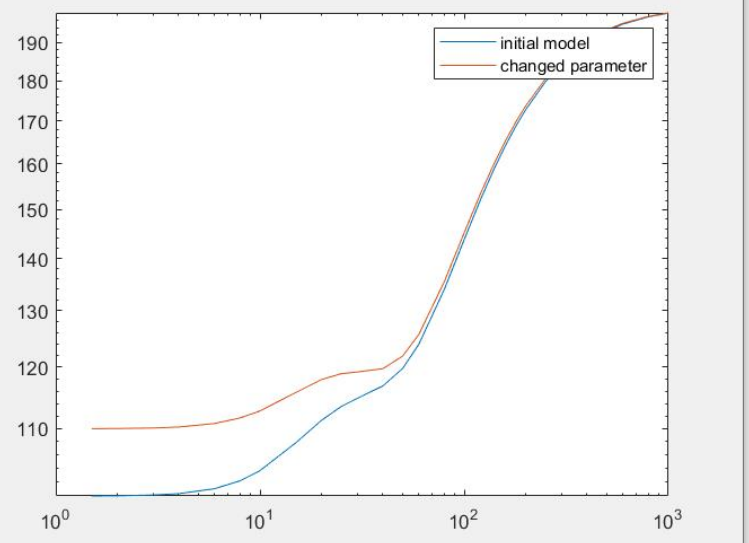
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
fx >>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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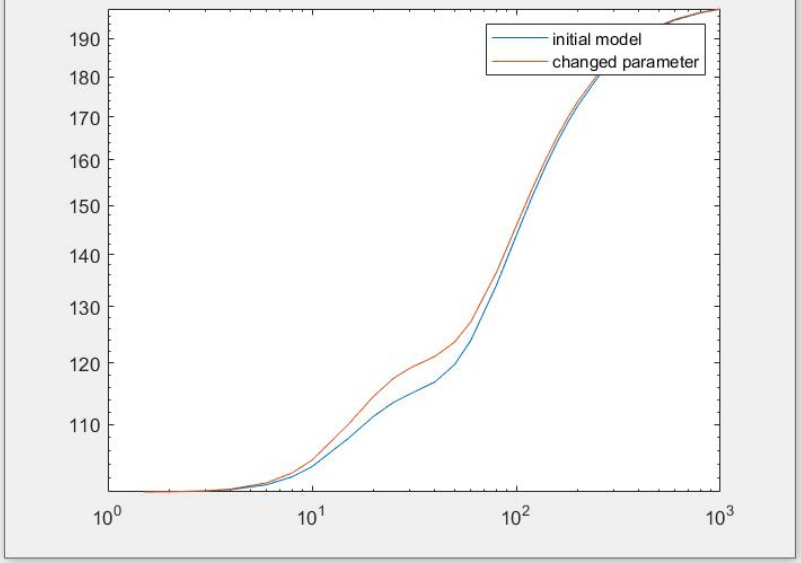
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
>>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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Utkarsh

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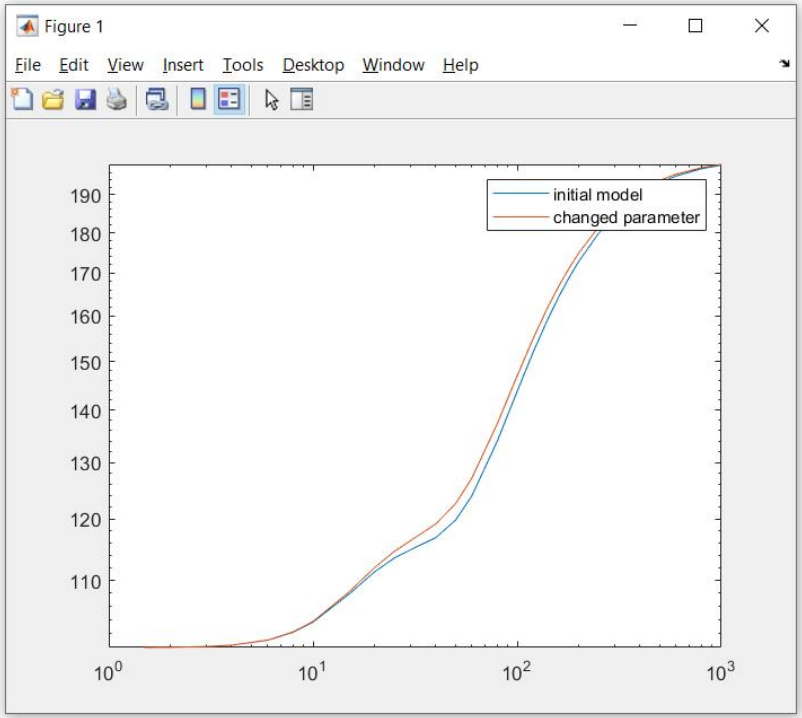
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
>>
```



Workspace

Name

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Select a

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Utkarsh

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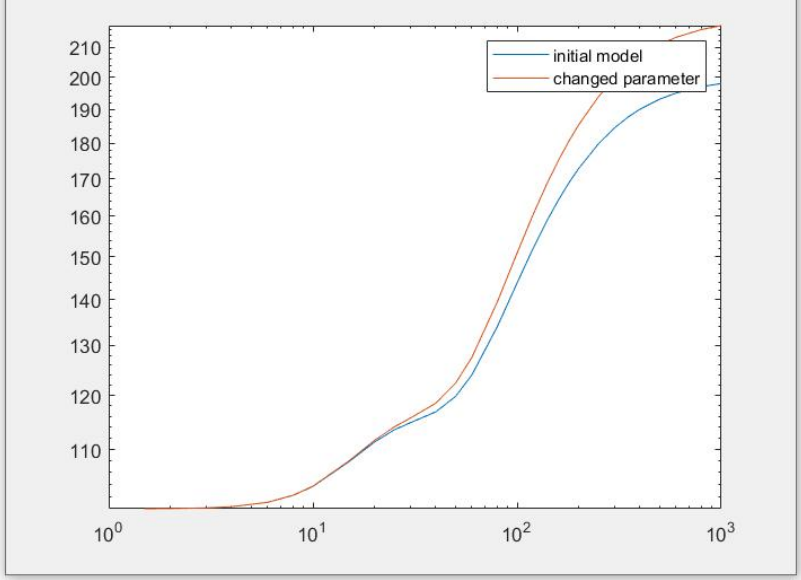
Command Window

```
Enter the number of layer4
Enter resistivity from top to bottom100
Enter resistivity from top to bottom150
Enter resistivity from top to bottom50
Enter resistivity from top to bottom200
Enter thickness from top to bottom9
Enter thickness from top to bottom10
Enter thickness from top to bottom8
fx >>
```

Figure 1

File Edit View Insert Tools Desktop Window Help



Workspace

Name

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100% ENG 15:18 10-11-2021