

Code For Graph 2

```
t=unnamed(:,1);
V=unnamed(:,3);
vo=peak2peak(V);
V1=unnamed(:,2);
V2=unnamed(:,5);
V3=unnamed(:,8);
V4=unnamed(:,12);
V5=unnamed(:,15);
V6=unnamed(:,18);
vi=peak2peak(V2);
scatter(t,V)
hold on
scatter(t,V1)
scatter(t,V2)
scatter(t,V3)
scatter(t,V4)
scatter(t,V5)
scatter(t,V6)
xlabel("Time (s)")
ylabel("Voltage (V)")
legend('Voltage Input', 'Voltage Output 1','Voltage Output 2','Voltage
Output 3','Voltage Output 4','Voltage Output 5','Voltage Output 6');
hold on
ExpInput=unnamed(:,1);
ExOutput=unnamed(:,2);
scatter(ExOutput,ExpInput)
xlabel("Initial Voltage and Initial Resistance")
ylabel("Final Voltage and Final Resistance")
```

Code for Graph 3

```
Vo=unnamed(:,1);
Vi=unnamed(:,2);
Vo1=unnamed(:,3);
Vi1=unnamed(:,4);
Vo2=unnamed(:,5);
Vi2=unnamed(:,6);
Vo3=unnamed(:,7);
Vi3=unnamed(:,8);
Vo4=unnamed(:,9);
Vi4=unnamed(:,10);
Vo5=unnamed(:,11);
Vi5=unnamed(:,12);
scatter(Vi,Vo)
hold on
scatter(Vi1,Vo1)
scatter(Vi2,Vo2)
scatter(Vi3,Vo3)
scatter(Vi4,Vo4)
scatter(Vi5,Vo5)
```

```

xlabel("Input Voltage (V)")
ylabel("Output Voltage (V)")
legend('Voltage of 1st row Appendix', 'Voltage of 2nd row
Appendix','Voltage of 3rd row Appendix','Voltage of 4th row
Appendix','Voltage of 5th row Appendix','Voltage of 6th row
Appendix');

```

Code for Graph 7

```

t=unnamed1(:,1);
Vo=unnamed1(:,2);
Vi=(1/10)*unnamed1(:,3);
f=Vo.*(cos(0.00001*t));
area(t,Vo)
hold on
plot(t,Vi)
scatter(t,f)
xlabel("Time (s)")
ylabel("Voltage (V)")
legend('Voltage Output', 'Voltage Input','Voltage Input * Cos(wt)')

```

Code for Graph 9

```

t=unnamed(:,7);
Vo=unnamed(:,8);
Vi=unnamed(:,9);
a=(-10)*trapz(t,Vi);
b=trapz(t,Vo);
area(t,Vo)
hold on
area(t,Vi)
a
b
xlabel("Time (s)")
ylabel("Voltage (V)")
legend('Voltage Output', 'Voltage Input')

```