Overlay Plot

Method - 1 Using the plot command to generate overlay plots

plot(x1,y1,x2,y2,':',x3,y3,'o')

Method - 2 Using the hold command to generate overlay plots

```
x = linspace(0,2*pi,100)
```

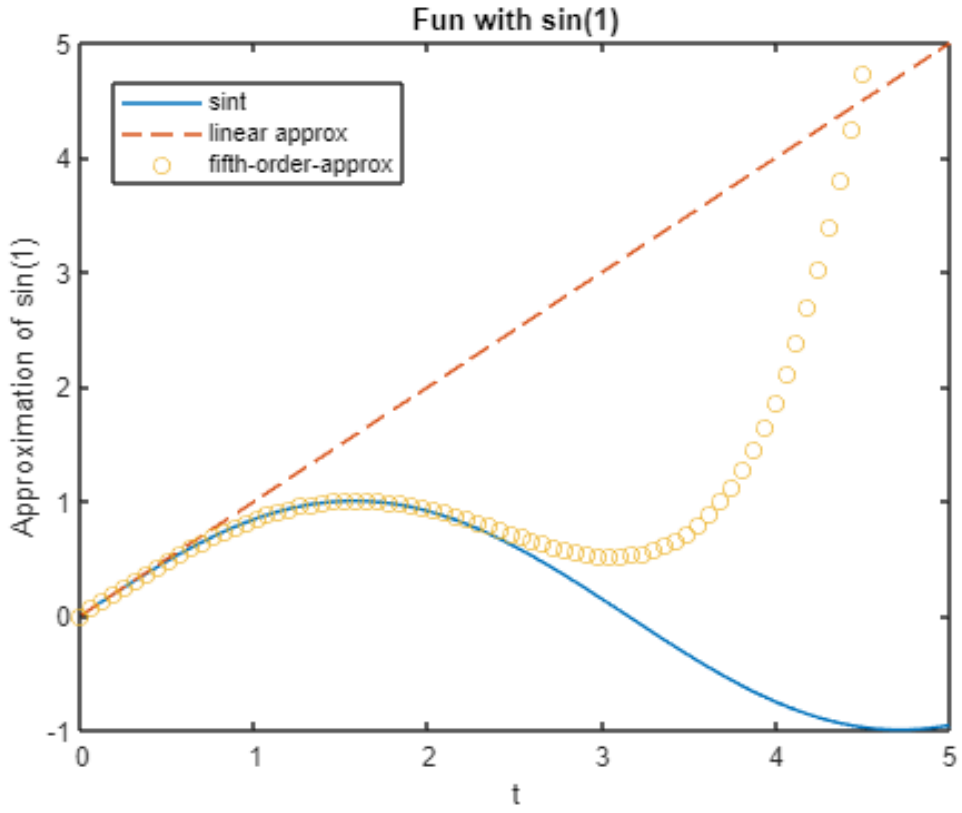
```
x = 1×100
         0    0.0635    0.1269    0.1904    0.2539    0.3173    0.3808    0.4443 ···
```

```
y1 = sin(x)
```

```
y1 = 1×100
         0    0.0634    0.1266    0.1893    0.2511    0.3120    0.3717    0.4298 ···
```

```
plot(x,y1)
hold on
y2 = x;
plot(x,y2,'--')
y3 = x - (x.^3)/6 + (x.^5)/120;
plot(x,y3,'o')
axis([0 5 -1 5])
xlabel('t')
ylabel('Approximation of sin(1)')
title('Fun with sin(1)')
legend('sint','linear approx','fifth-order-approx')
hold off

legend("Position",[0.16091,0.76058,0.25714,0.11905])
```



Method - 3 Using the line command to generate overlay plots

Specailized 2D plot

```
area - creates a filled area plot
bar - creates a bar graph
barh - creates horizontal bar graph
comet - makes animated 2D plot
compass - creates arrow graph for complex numbers
contour - makes contour plots
contourf - makes filled contour plots
errorbar - plots a graph and puts error bars
feather - makes feather plot
fill - draws a filled ploygon
fplot - plots a function of a single variable
hist - makes histograms,
loglog - creates plot with log scale on both the r-axis and the y-axis,
pareto - makes pareto plots,
pcolor - makes pseudocolor plot of a matrix,
pie - creates a pie chart,
plotyy - makes a double y-axis plot,
plotmatrix - makes a scatter plot of a matrix,
polar - plots curves in polar coordinates,
quiver - plots vector fields,
rose - makes angled histograms,
```

```
scatter - creates a scatter plot,
semilogx - makes semilog plot with log scale on the x-axis,
semilogy - makes semilog plot with log scale on the y-axis,
stairs - plots a stair graph, and
stem - plots a stem graph.
```