

Making Charts

Line Chart

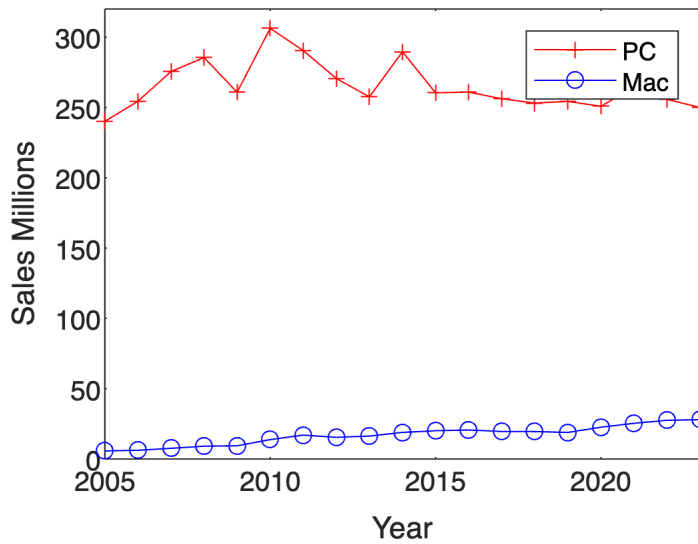
```
macPCSales = readtable("MacPCSales.csv")
```

```
macPCSales = 20x4 table
```

	Year	Mac	PC	MacShare
1	2004	4.1000	229.5000	1.8000
2	2005	5.7000	240.1000	2.4000
3	2006	6.2000	254.4000	2.4000
4	2007	7.6000	275.5000	2.7000
5	2008	9.1000	285.5000	3.2000
6	2009	9.4000	260.8000	3.6000
7	2010	13.8000	306.3000	4.5000
8	2011	17	290.4000	5.8000
9	2012	15.4000	270.6000	5.7000
10	2013	16.3000	257.5000	6.3000
11	2014	18.9000	289.6000	6.5000
12	2015	20.1000	260.4000	7.7000
13	2016	20.6000	260.9000	7.9000
14	2017	19.6000	256.2000	7.6000

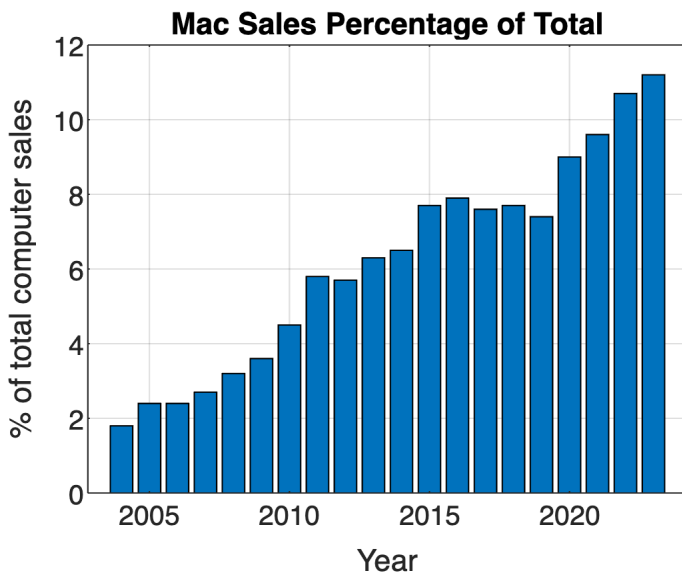
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```
plot(macPCSales.Year, macPCSales.PC, "r-+")
hold on;
plot(macPCSales.Year, macPCSales.Mac, "b-o")
xlabel("Year")
ylabel("Sales Millions")
xlim([2005 2023])
ylim([0 320])
legend(["PC" "Mac"])
hold off
```



Bar chart

```
bar(macPCSales.Year, macPCSales.MacShare)
title("Mac Sales Percentage of Total")
xlabel("Year")
ylabel("% of total computer sales")
grid
```



Error Bars

```
labdata = readtable("Physics Lab Data.csv");
```

Warning: Column headers from the file were modified to make them valid MATLAB identifiers before creating variable names for the table. The original column headers are saved in the VariableDescriptions property.
Set 'VariableNamingRule' to 'preserve' to use the original column headers as table variable names.

```
labdata.pred = (labdata.PullingMass * 9.8) ./ (labdata.CartMass +  
labdata.PullingMass);  
labdata.err = abs(labdata.Acceleration - labdata.pred)
```

labdata = 4x5 table

	CartMass	PullingMass	Acceleration	pred	err
1	0.4300	0.0600	1.1400	1.2000	0.0600
2	0.3700	0.1200	2.3400	2.4000	0.0600
3	0.3100	0.1800	3.7600	3.6000	0.1600
4	0.2500	0.2400	4.8300	4.8000	0.0300

```
errorbar(labdata.PullingMass, labdata.Acceleration, labdata.err)  
xlabel("Pulling Mass")  
ylabel("Accelleration")
```

