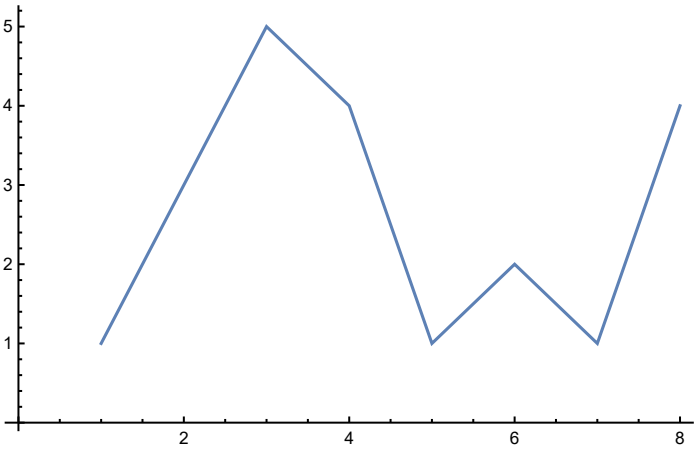
Displaying Lists

S.M. Raihanul Bashir

In[ ]:=

```
ListLinePlot[{1, 3, 5, 4, 1, 2, 1, 4}]
```

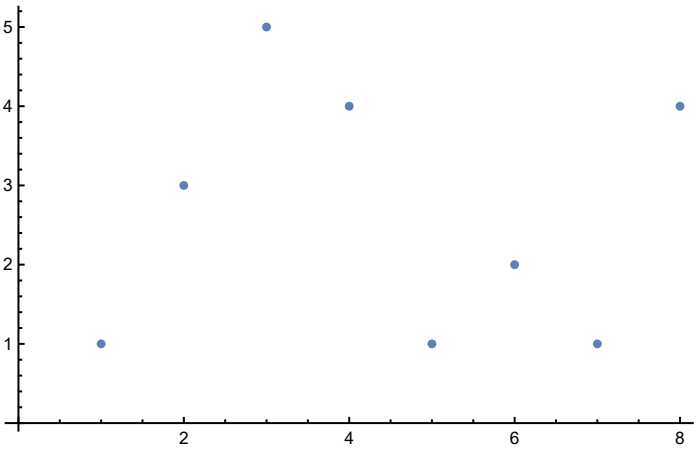
Out[ ]=



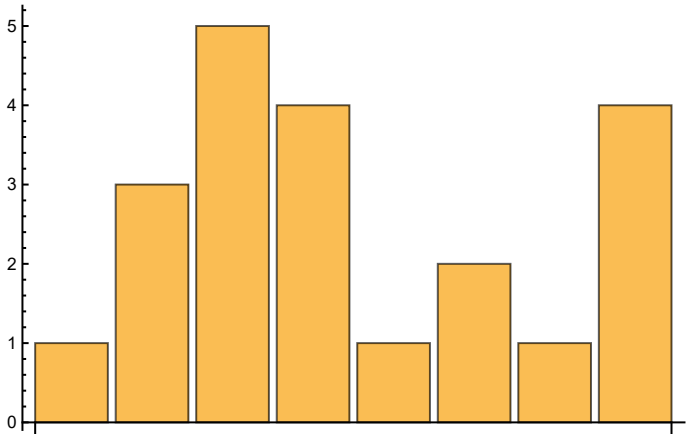
In[ ]:=

```
ListPlot[{1, 3, 5, 4, 1, 2, 1, 4}]
```

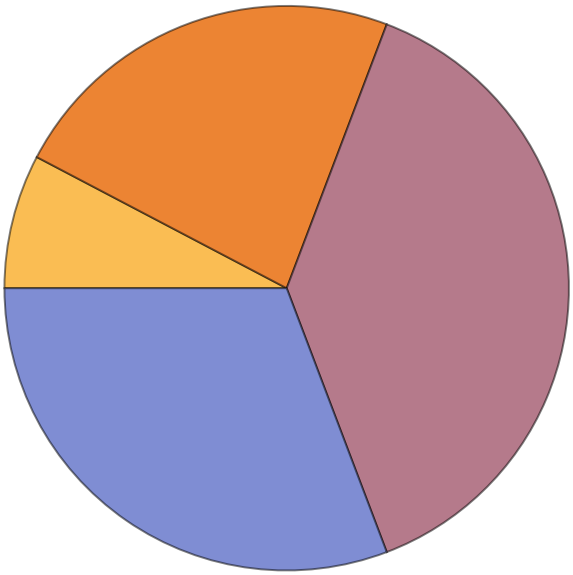
Out[ ]=



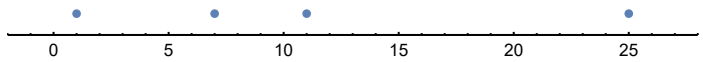
In[ ]:=
```
BarChart[{1, 3, 5, 4, 1, 2, 1, 4}]
```

Out[ ]=


In[ ]:=
```
PieChart[{1, 3, 5, 4}]
```

Out[ ]=


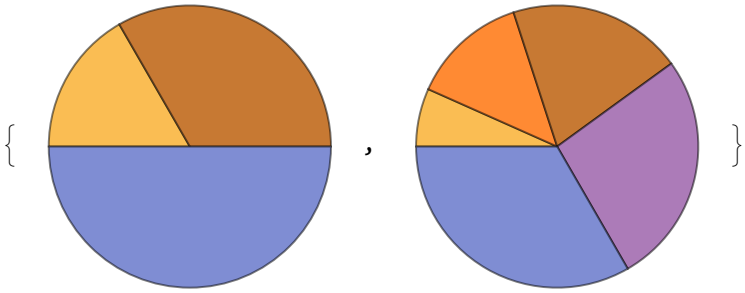
In[ ]:=
```
NumberLinePlot[{1, 7, 11, 25}]
```

Out[ ]=


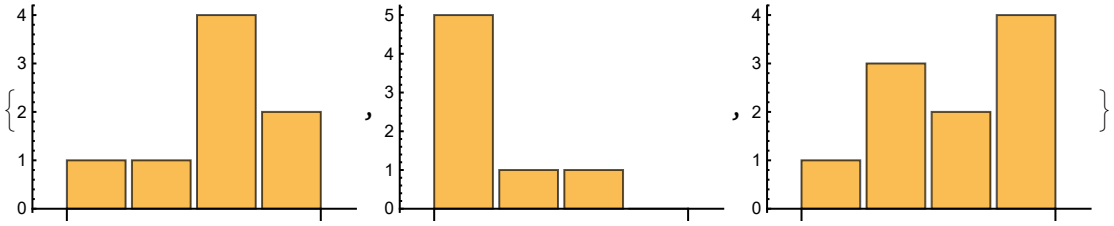
In[ ]:=
```
Column[{100, 350, 502, 400}]
```
Out[ ]=
```
100
350
502
400
```

*** Lists can contain anything, including graphics.

In[ ]:=
```
{PieChart[Range[3]], PieChart[Range[5]]}
```
Out[ ]=



In[ ]:=
```
{BarChart[{1, 1, 4, 2}], BarChart[{5, 1, 1, 0}], BarChart[{1, 3, 2, 4}]}
```
Out[ ]=

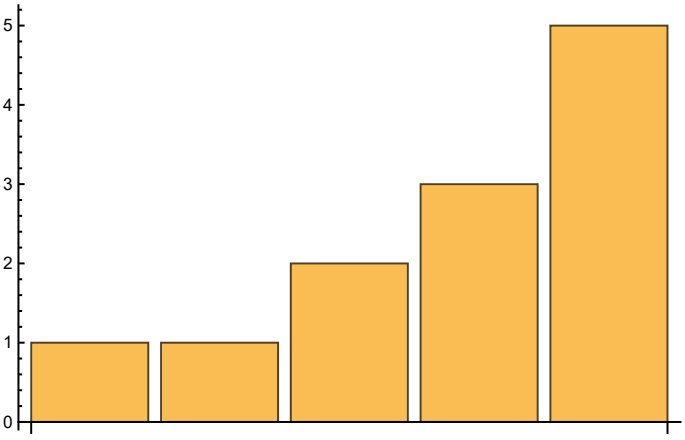


Exercises:

1. Make a bar chart of {1, 1, 2, 3, 5}

In[ ]:=
```
BarChart[{1, 1, 2, 3, 5}]
```

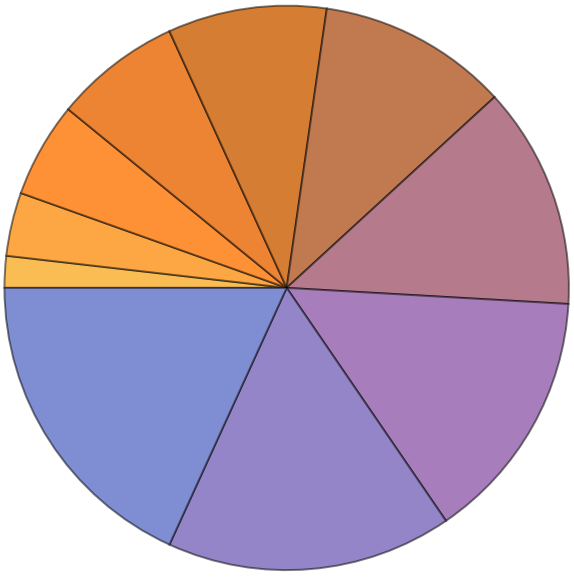
Out[ ]=



2. Make a pie chart of numbers from 1 to 10

In[ ]:=
```
PieChart[Range[10]]
```

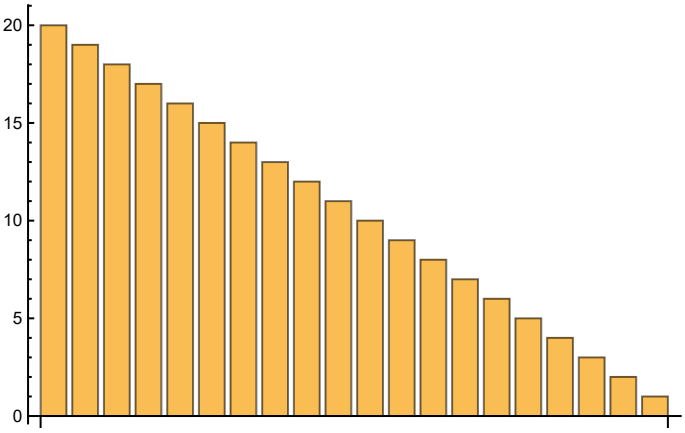
Out[ ]=



3. Make a bar chart of numbers counting down from 20 to 1

In[ ]:=
```
BarChart[Reverse[Range[20]]]
```

Out[ ]=



4. Display numbers from 1 to 5 in a column

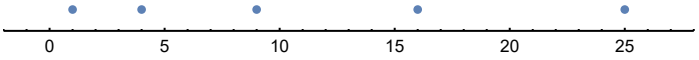
In[ ]:=
```
Column[Range[5]]
```

Out[ ]=
```
1
2
3
4
5
```

5. Make a number line plot of the squares {1, 4, 9, 16, 25}.

In[ ]:=
```
NumberLinePlot[{1, 4, 9, 16, 25}]
```

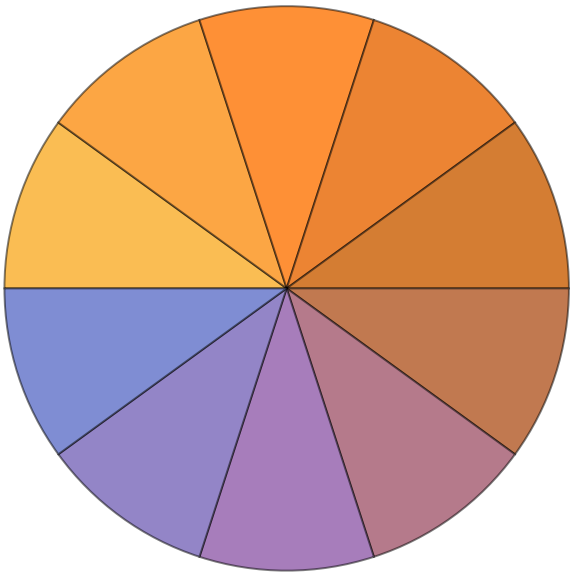
Out[ ]=



6. Make a pie chart with 10 identical segments, each of size 1

In[ ]:=
```
PieChart[{1, 1, 1, 1, 1, 1, 1, 1, 1, 1}]
```

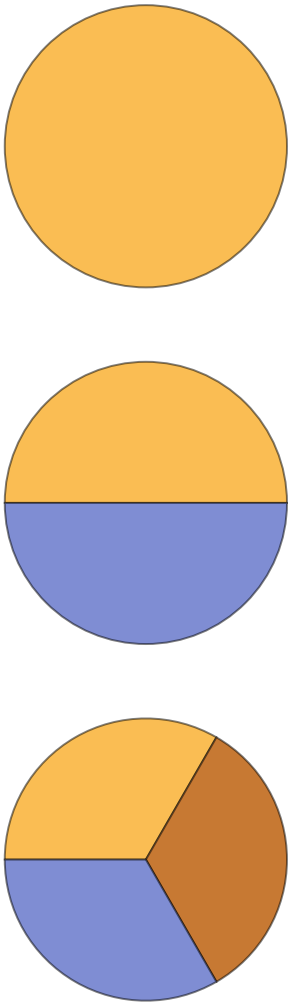
Out[ ]=



7. Make a column of pie charts with 1, 2 and 3 identical segments

In[ ]:=
```
Column[{PieChart[{1}], PieChart[{1, 1}], PieChart[{1, 1, 1}]}]
```

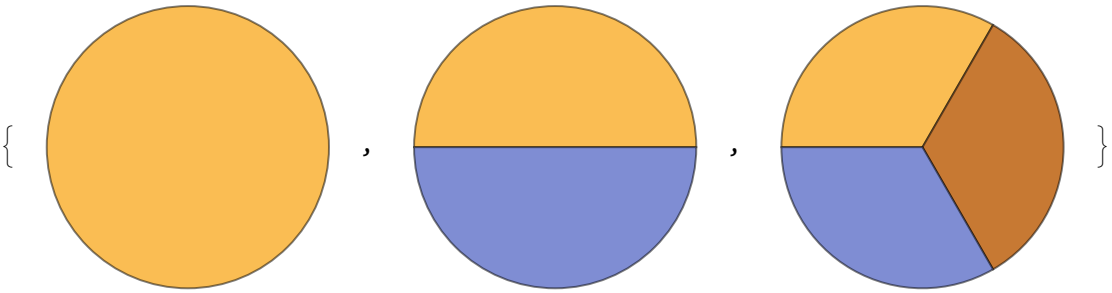
Out[ ]=



8. Make a list of pie charts with 1, 2 and 3 identical segments

In[ ]:=
```
List[PieChart[{1}], PieChart[{1, 1}], PieChart[{1, 1, 1}] ]
```

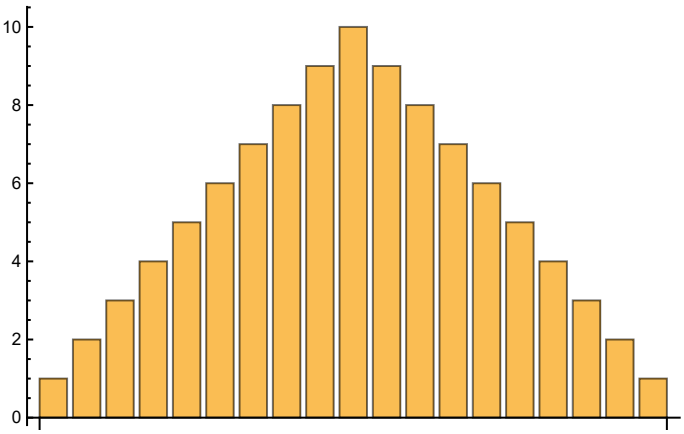
Out[ ]=



9. Make a bar chart of the sequence 1, 2, 3, ..., 9, 10, 9, 8, 7, ..., 1

```
In[ ]:= BarChart[Join[Range[10], Reverse[Range[9]]]]
```

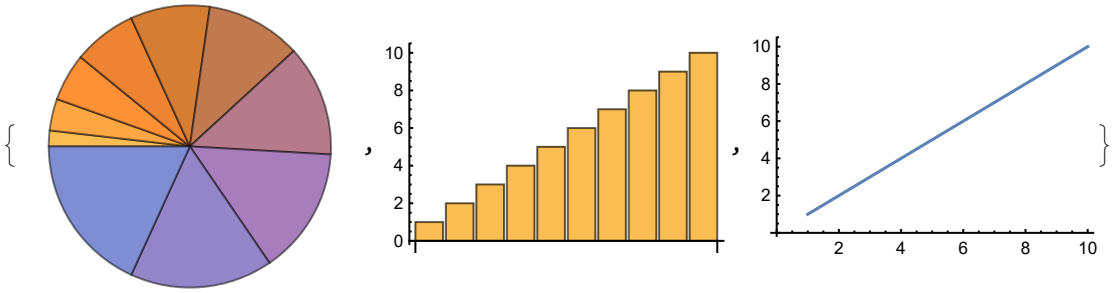
Out[ ]=



10. Make a list of a pie chart, bar chart and line plot of the numbers from 1 to 10

```
In[ ]:= List[PieChart[Range[10]], BarChart[Range[10]], ListLinePlot[Range[10]]]
```

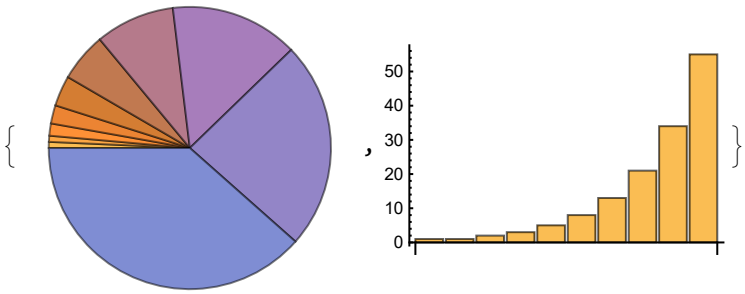
Out[ ]=



11. Make a list of a pie chart and a bar chart of {1, 1, 2, 3, 5, 8, 13, 21, 34, 55}

```
In[ ]:= List[PieChart[Fibonacci[Range[10]]], BarChart[Fibonacci[Range[10]]]]
```

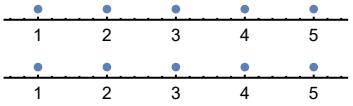
Out[ ]=



12. Make a column of two number line plots of {1, 2, 3, 4, 5}

In[ ]:=
```
Column[{NumberLinePlot[Range[5]], NumberLinePlot[Range[5]]}]
```

Out[ ]=



13. Make a number line of fractions 1/2, 1/3, ... through 1/9

In[ ]:=
```
NumberLinePlot[{1 / 2, 1 / 3, 1 / 4, 1 / 5, 1 / 6, 1 / 7, 1 / 8, 1 / 9}]
```

Out[ ]=