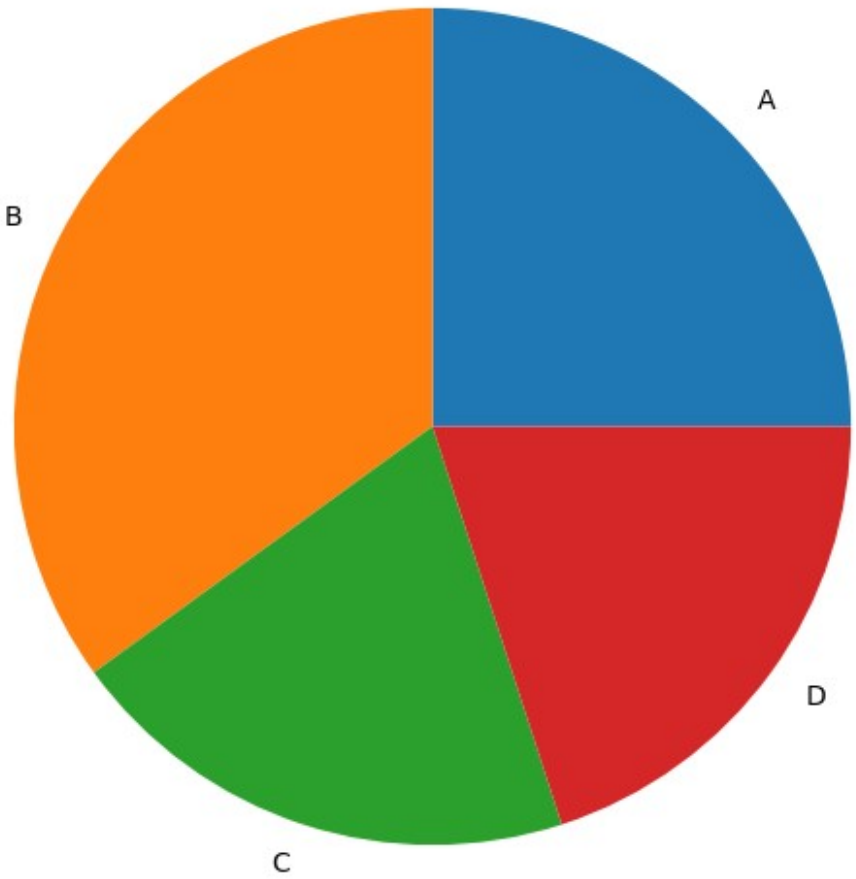
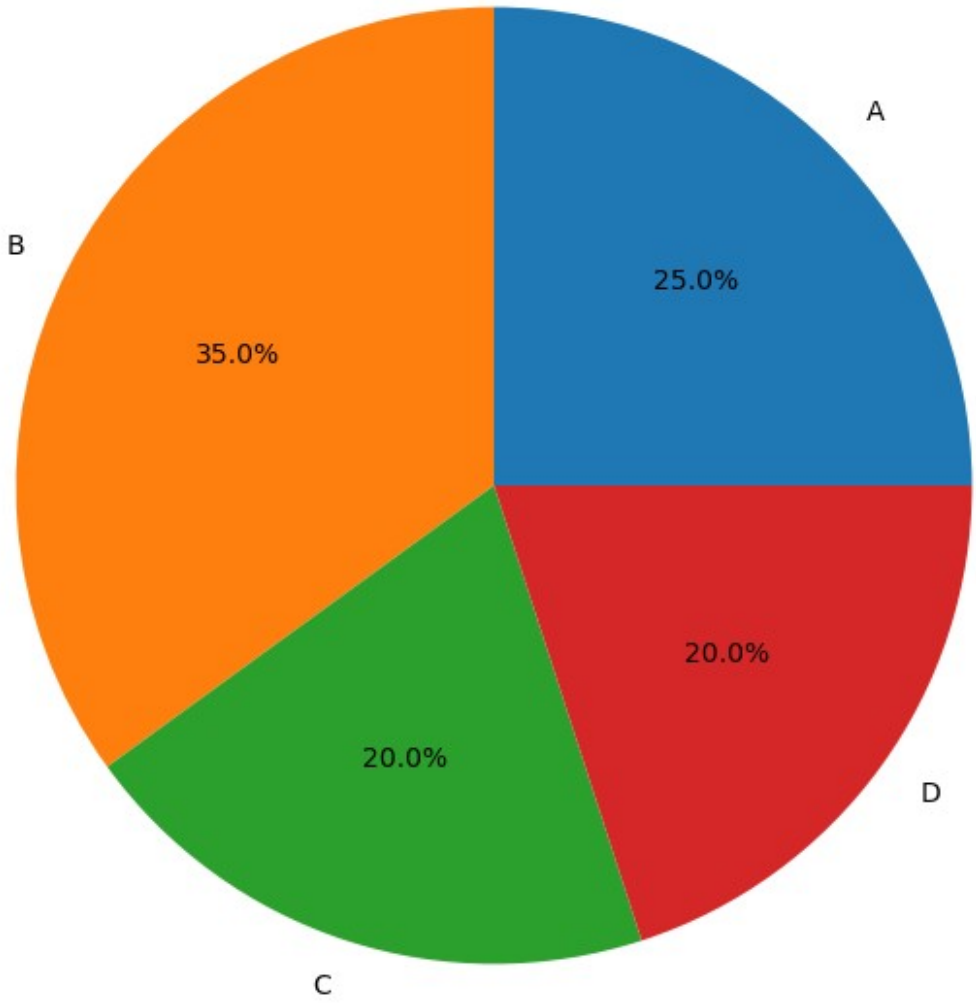
```
import matplotlib.pyplot as plt

Age_group = ['A', 'B', 'C', 'D']
Age_group_populations = [25, 35, 20, 20]

#a.Make a pie chat using above table data.
plt.figure(figsize=(7,7))
plt.pie(values, labels=categories)
```

```
([<matplotlib.patches.Wedge at 0x2456aa44b00>,
  <matplotlib.patches.Wedge at 0x2456a9e9880>,
  <matplotlib.patches.Wedge at 0x2456aa45220>,
  <matplotlib.patches.Wedge at 0x2456aa455b0>],
 [Text(0.7778174593052024, 0.7778174593052024, 'A'),
  Text(-0.9801071672559597, 0.49938956806635293, 'B'),
  Text(-0.33991872319707345, -1.046162158377023, 'C'),
  Text(0.8899186877588748, -0.646563785853741, 'D')])
```



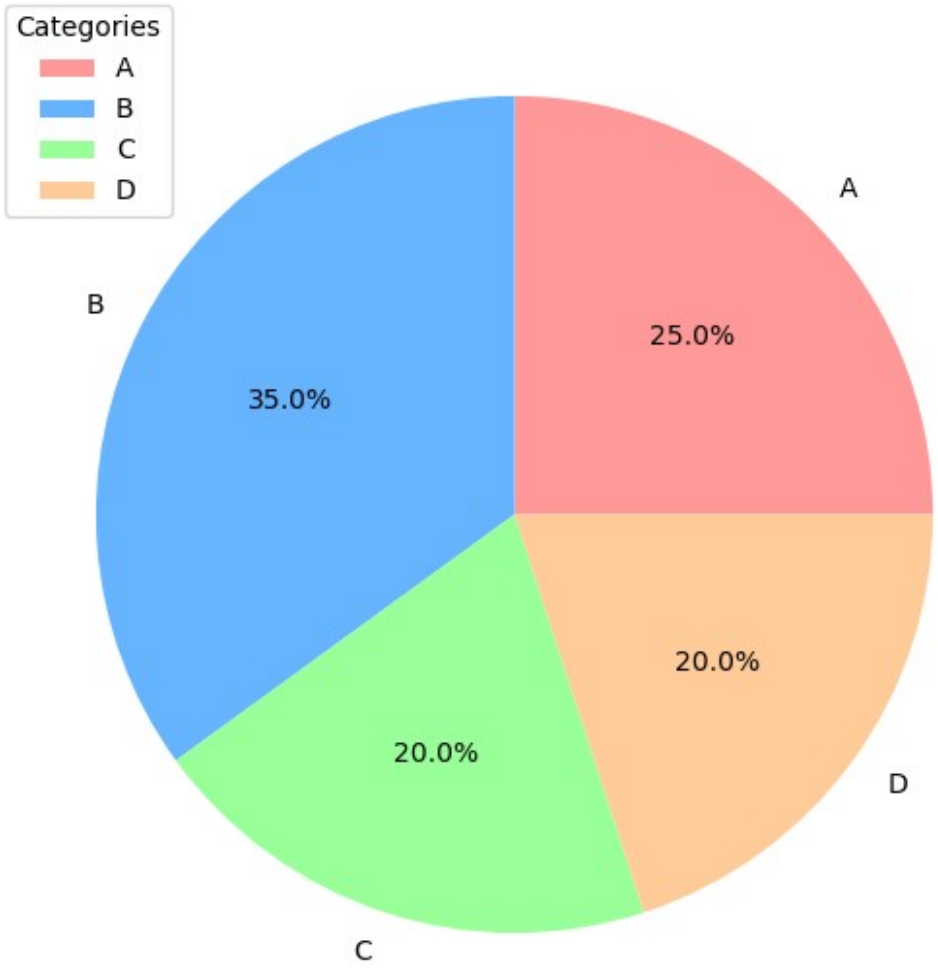
```
#b. Show the percentage of each part into the pie chart.
plt.figure(figsize=(8, 8))
plt.pie(values, labels=categories, autopct='%1.1f%%')
```

```
([<matplotlib.patches.Wedge at 0x2456ad0d9a0>,
  <matplotlib.patches.Wedge at 0x2456ad0e4b0>,
  <matplotlib.patches.Wedge at 0x2456ad0d370>,
  <matplotlib.patches.Wedge at 0x2456a142270>],
 [Text(0.7778174593052024, 0.7778174593052024, 'A'),
  Text(-0.9801071672559597, 0.49938956806635293, 'B'),
  Text(-0.33991872319707345, -1.046162158377023, 'C'),
  Text(0.8899186877588748, -0.646563785853741, 'D')],
 [Text(0.4242640687119285, 0.4242640687119285, '25.0%'),
  Text(-0.5346039094123416, 0.2723943098543743, '35.0%'),
  Text(-0.18541021265294913, -0.5706339045692852, '20.0%'),
  Text(0.4854101933230226, -0.3526711559202223, '20.0%')])
```



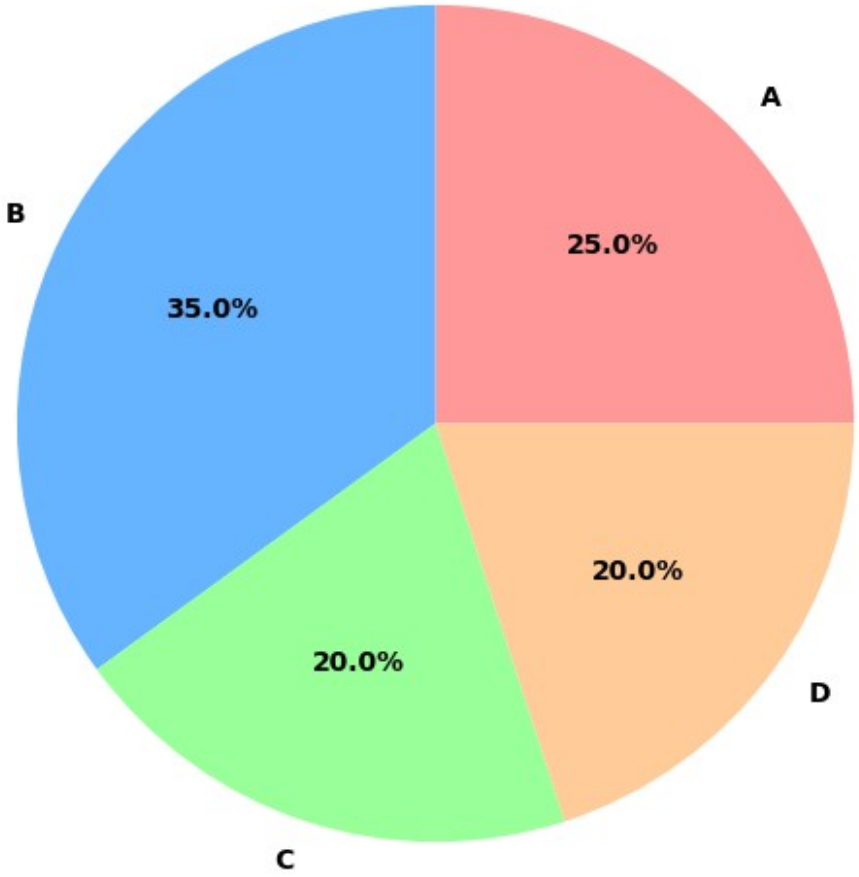

```
#c. Change the color of the pie chart and add legend into the
visualization.
colors = ['#ff9999', '#66b3ff', '#99ff99', '#ffcc99']
plt.figure(figsize=(7,7))
plt.pie(values, labels=categories, autopct='%1.1f%%', colors=colors)
plt.legend(categories, title="Categories", loc="upper left")
```

```
<matplotlib.legend.Legend at 0x2456a9081a0>
```

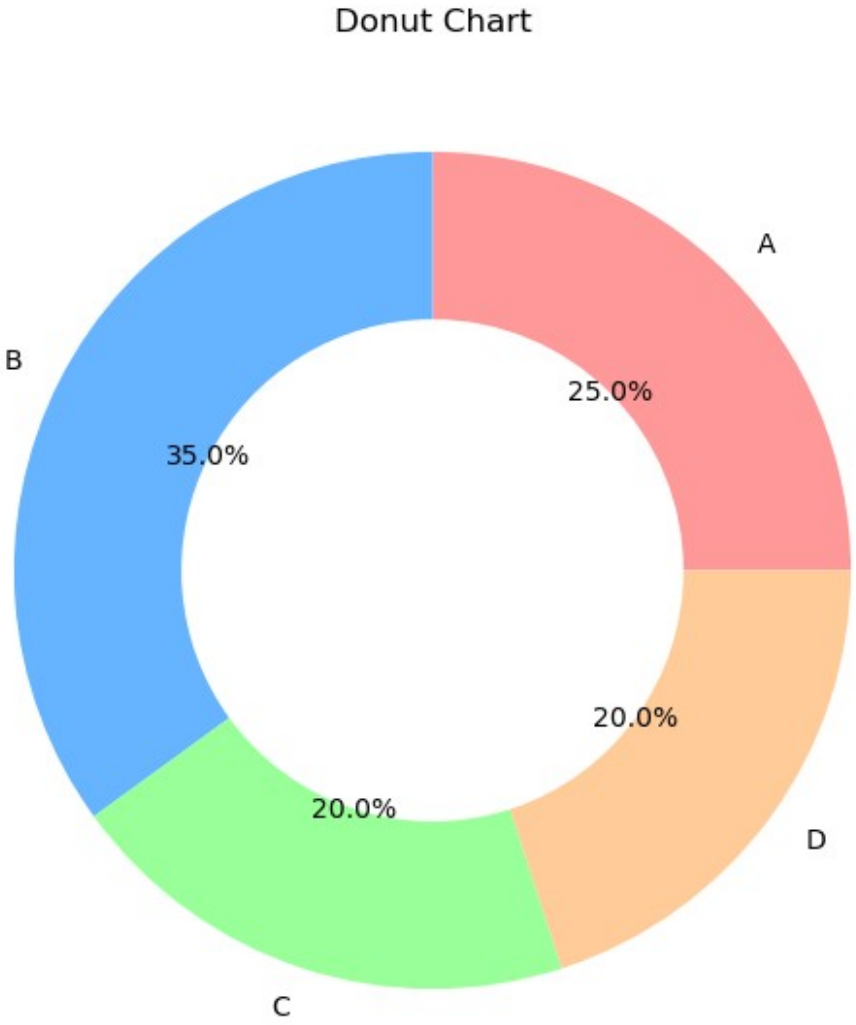



```
#d. Move the name of lables into the pie chart in bold.
plt.figure(figsize=(7,7))
plt.pie(values, labels=categories, autopct='%1.1f%%', colors=colors,
textprops={'fontweight': 'bold'})
```

```
([<matplotlib.patches.Wedge at 0x2456b39cd70>,
  <matplotlib.patches.Wedge at 0x2456b39ccb0>,
  <matplotlib.patches.Wedge at 0x2456b39d5b0>,
  <matplotlib.patches.Wedge at 0x2456b39dbe0>],
 [Text(0.7778174593052024, 0.7778174593052024, 'A'),
  Text(-0.9801071672559597, 0.49938956806635293, 'B'),
  Text(-0.33991872319707345, -1.046162158377023, 'C'),
  Text(0.8899186877588748, -0.646563785853741, 'D')],
 [Text(0.4242640687119285, 0.4242640687119285, '25.0%'),
  Text(-0.5346039094123416, 0.2723943098543743, '35.0%'),
  Text(-0.18541021265294913, -0.5706339045692852, '20.0%'),
  Text(0.4854101933230226, -0.3526711559202223, '20.0%')])
```




```
#e. Convert the pie chart into Donut chart.
plt.figure(figsize=(7,7))
plt.pie(values, labels=categories, autopct='%1.1f%%', colors=colors,
wedgeprops={'width': 0.4})
plt.title("Donut Chart")

plt.show()
```


Donut Chart
A
B
C
D
25.0%
35.0%
20.0%
20.0%