

In [110]:

```
import plotly
from plotly.offline import download_plotlyjs, init_notebook_mode, iplot
init_notebook_mode() # run at the start of every notebook
```

In [111]:

```
from plotly.offline import plot
from plotly.graph_objs import *
from plotly.tools import FigureFactory as FF
import plotly.plotly as py
import numpy as np
```

In [107]:

```
def plot_pie(labels,values,title):
    fig = {
        'data': [{'labels': labels,
                    'values': values,
                    'type': 'pie'}],
        'layout': {'title': title}
    }
    return iplot(fig,show_link=False)
def plot_barchart(labels,values,titles,maintitle):
    trace1 = Bar(
        x=labels,
        y=values[0],
        name=titles[0]
    )
    trace2 = Bar(
        x=labels,
        y=values[1],
        name=titles[1]
    )
    data = [trace1, trace2]
    layout = Layout(
        title = maintitle,
        barmode='group'
    )
    fig = Figure(data=data, layout=layout)
    return py.iplot(fig,show_link=False)

def plot_scatter(labels,values,titles,maintitle):
    trace0 = Scatter(
        x=labels,
        y=values[0],
        name=titles[0],
        mode='markers',
        marker=dict(
            size=np.array(values[0])/2000,
        )
    )
    trace1 = Scatter(
        x=labels,
        y=values[1],
        name=titles[1],
        mode='markers',
        marker=dict(
            size=np.array(values[1])/2000,
        )
    )
    data = [trace0,trace1]
    layout = Layout(
        title = maintitle,
        showlegend=True,
        height=600,
        width=700,
    )
    fig = Figure(data=data, layout=layout)
    return py.iplot(fig,filename="Scatter")
```



In [4]:

```
import pandas as pd
```

In [5]:

```
data = pd.read_csv('data.csv',encoding='utf-8')  
data = data.drop(['Unnamed: 0'],axis=1)
```

In [6]:

```
idata=data[['Reviewer Username','Gender','Age Group','Product Type','Price(Dollar)']]  
import plotly.plotly as py  
import numpy as np  
from plotly.tools import FigureFactory as FF  
index=np.random.choice(idata.shape[0], 10)  
table = FF.create_table(idata.ix[index])  
py.iplot(table,show_link=False)
```

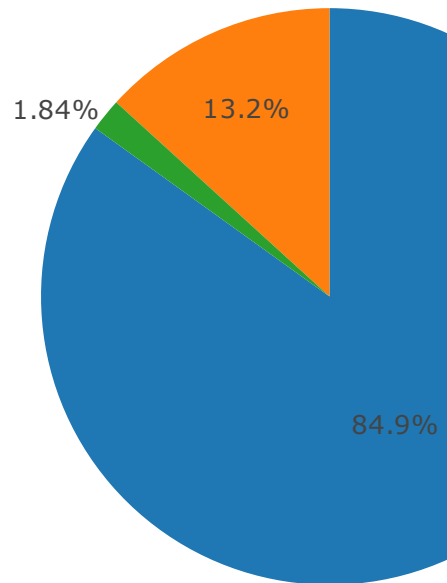
Out[6]:

| Reviewer Username | Gender | Age Group |
|--------------------|--------|-----------|
| Amazon Customer | female | 17-33 |
| Stephanie Sullivan | male | 33-90 |
| Kawika | female | 17-33 |
| Grace Gallagher | male | 17-33 |
| An. Ka. | male | 33-90 |
| Mike | male | 33-90 |
| Protosapien | female | 17-33 |
| Bassocantor | female | 33-90 |
| Anthony L. | male | 17-33 |
| Courtney | female | 17-33 |

In [7]:

```
ag=data['Age Group'].value_counts()  
plot_pie(ag.keys().tolist(),ag.values.tolist(),'Age Group Percentage In Amazon Reviews')
```

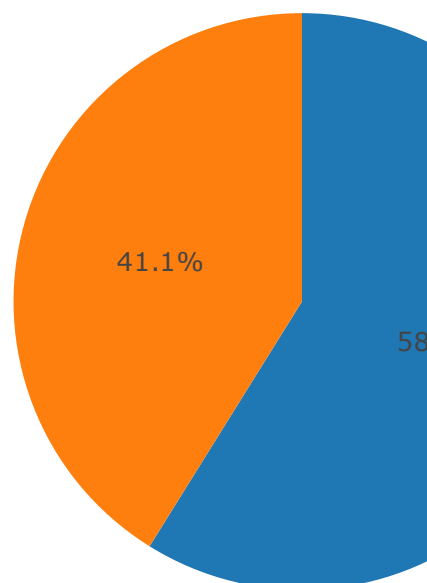
Age Group Percentage In Amazon Reviews



In [8]:

```
g = data['Gender'].value_counts()  
plot_pie(g.keys().tolist(),g.values.tolist(),'Gender Percentage in Amazon Reviews')
```

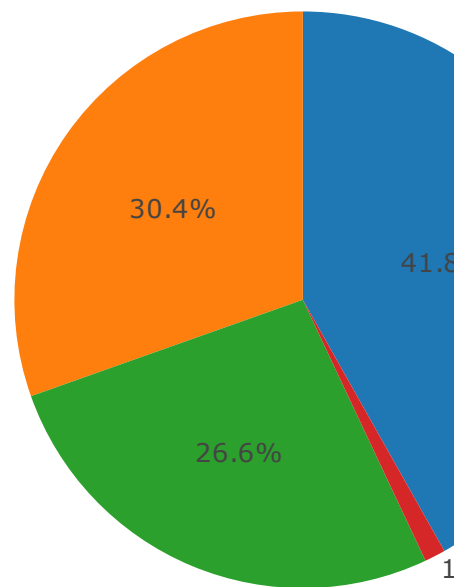
Gender Percentage in An



In [9]:

```
g = idata['Product Type'].value_counts()
g['others'] = g['$0']
g = g.drop('$0')
plot_pie(g.keys().tolist(), g.values.tolist(), 'Product Category Distribution')
```

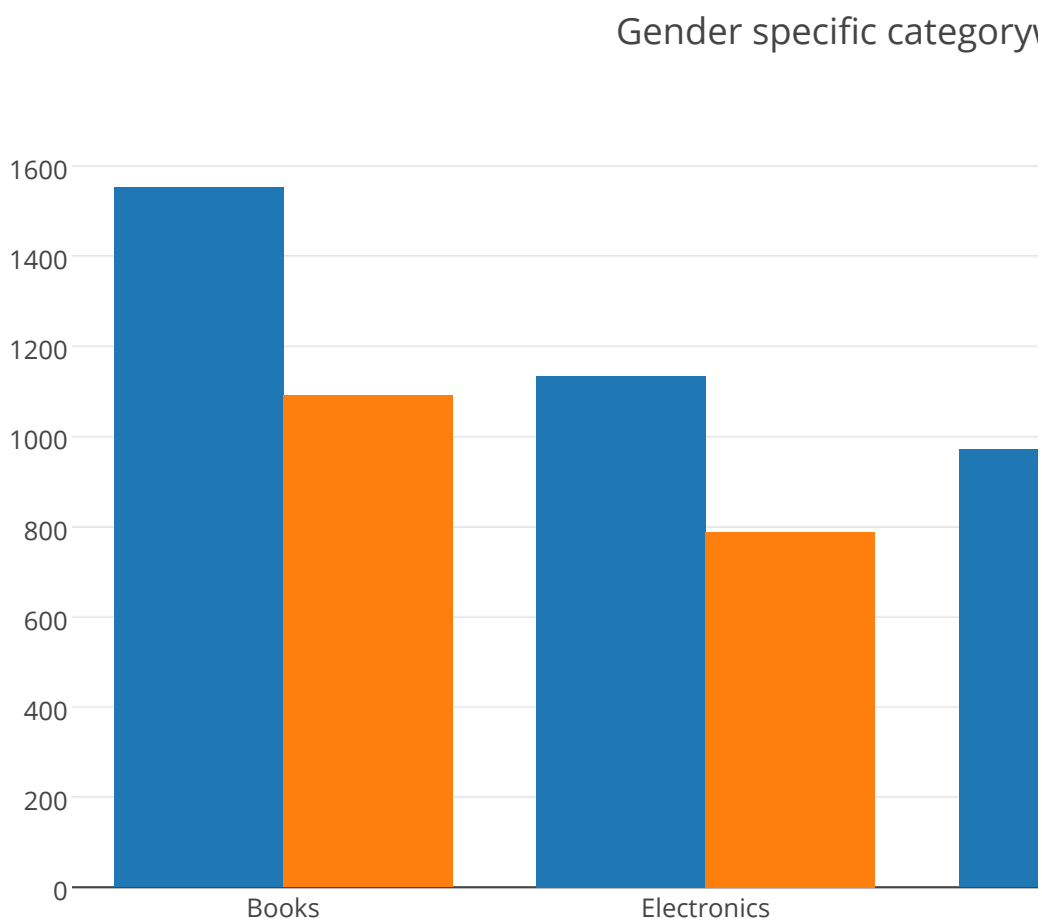
Product Category Di



In [89]:

```
females = idata.where(idata['Gender']=='female').dropna()
males = idata.where(idata['Gender']=='male').dropna()
labels = ['Books', 'Electronics', 'Desktop', 'Others']
values = []
values.append(males['Product Type'].value_counts().values)
values.append(females['Product Type'].value_counts().values)
titles = ['Male', 'Female']
plot_barchart(labels, values, titles, 'Gender specific categorywise Purchases')
```

Out[89]:



In []: