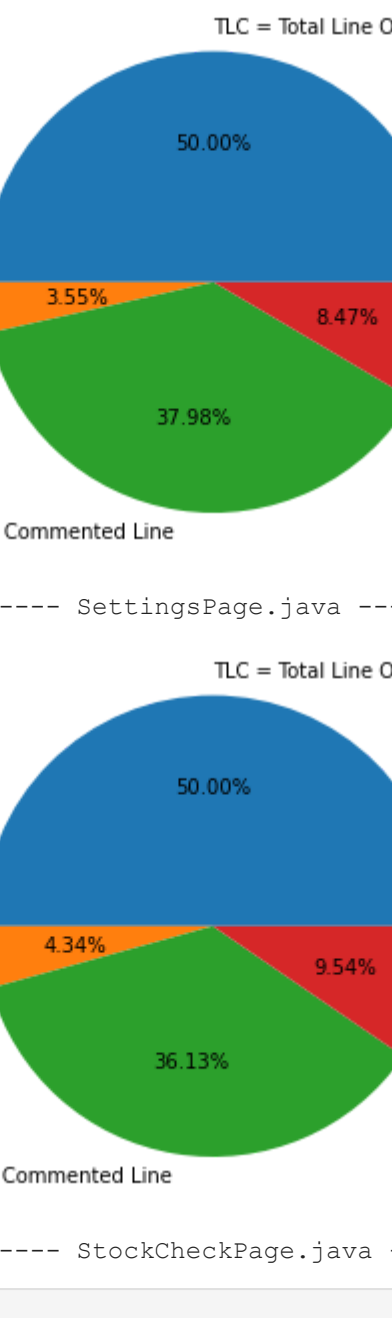
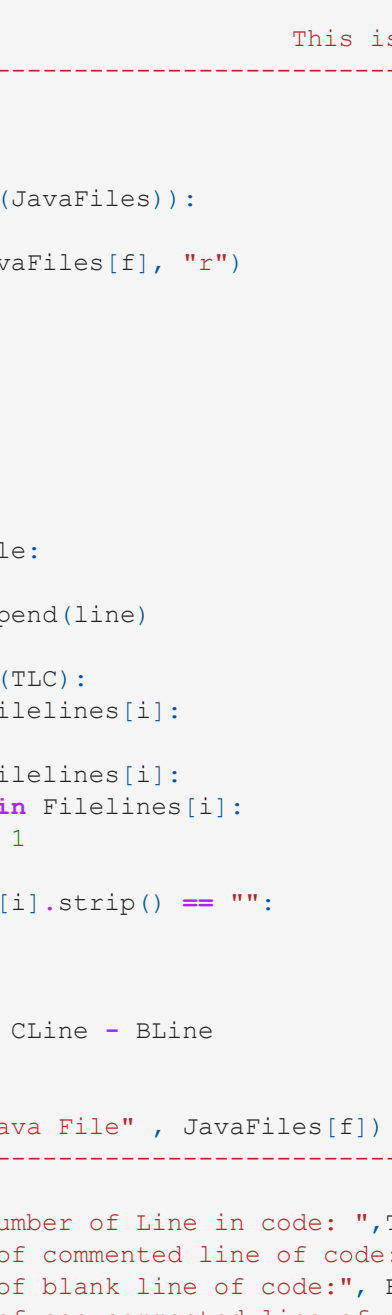
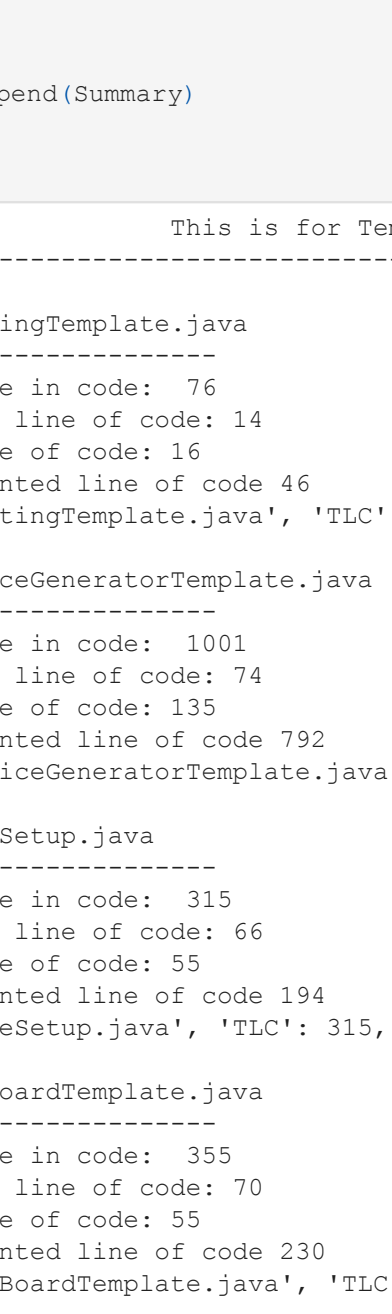
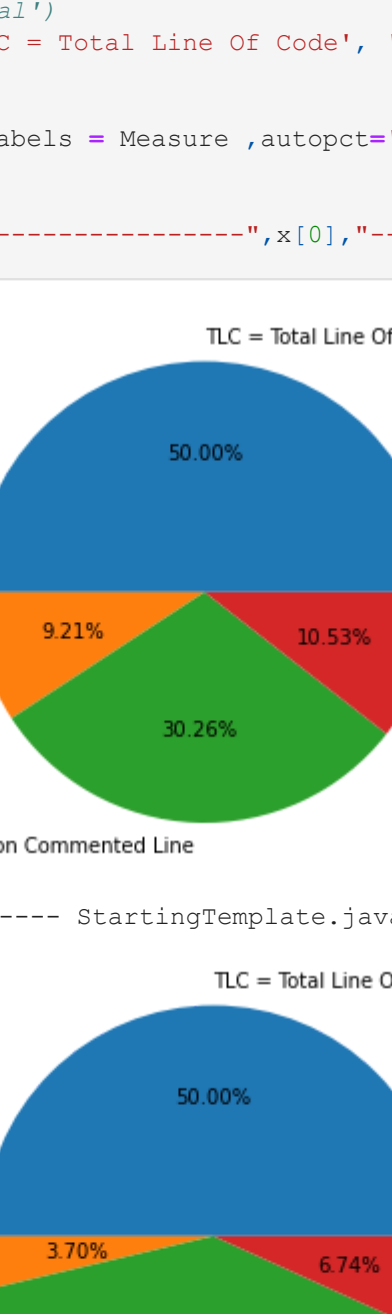
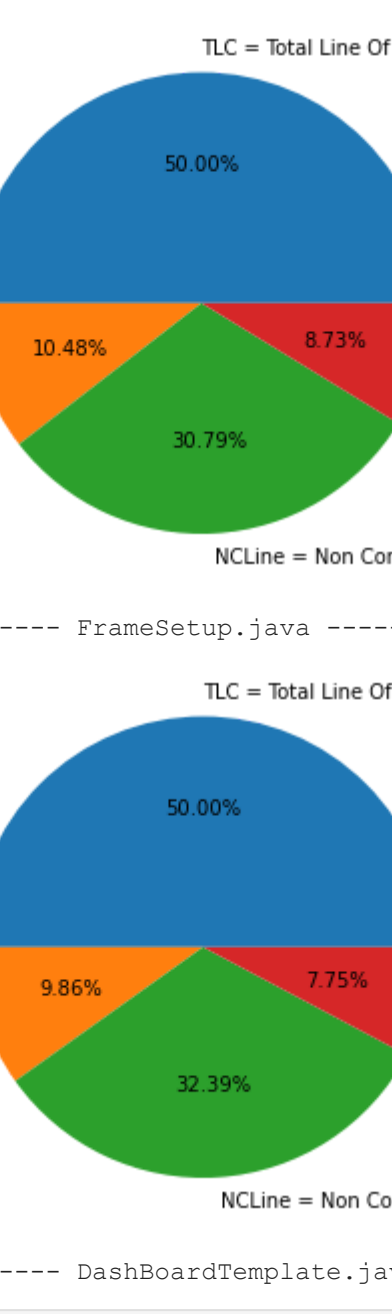
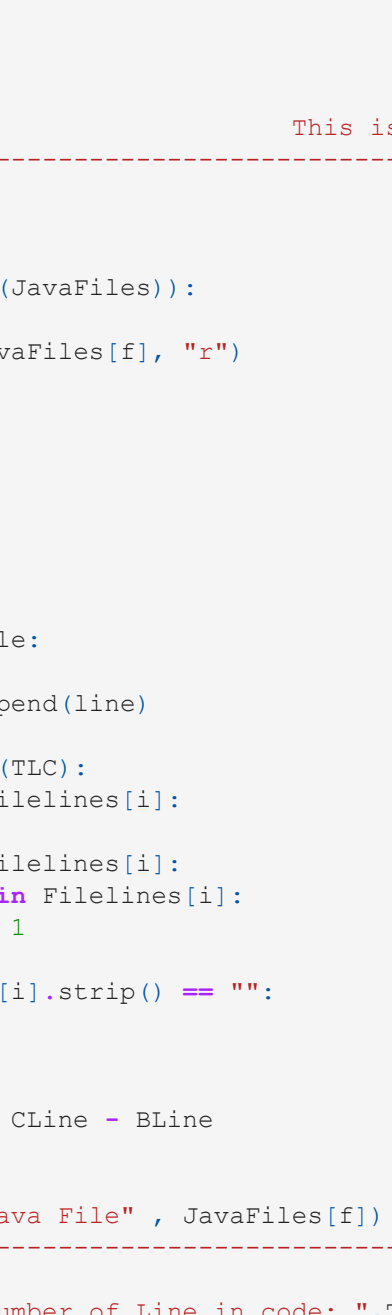
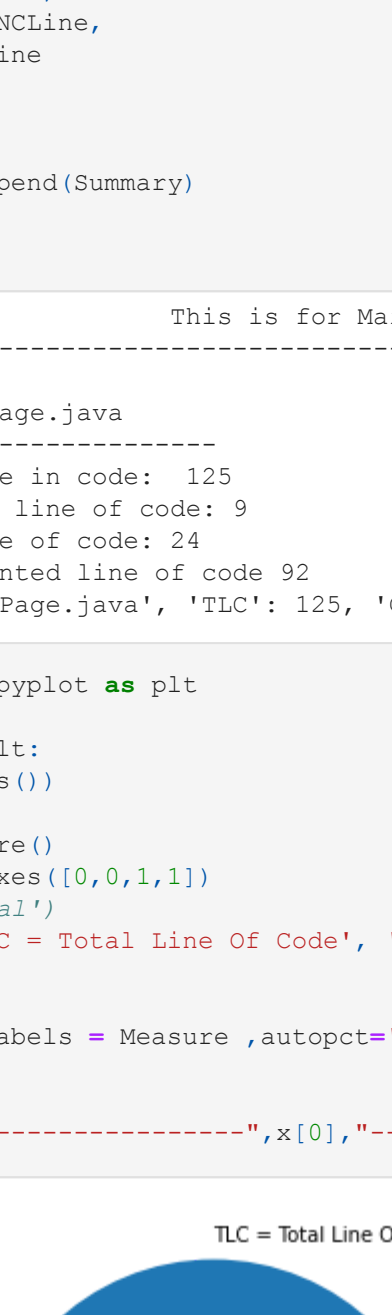
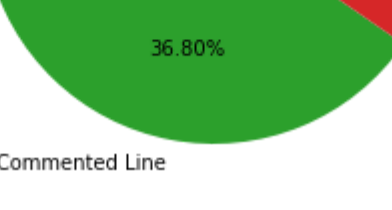
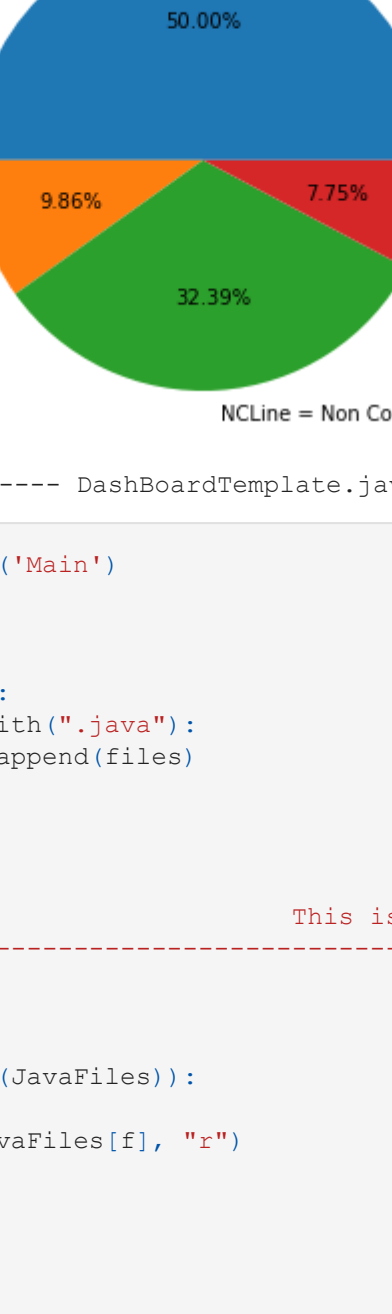
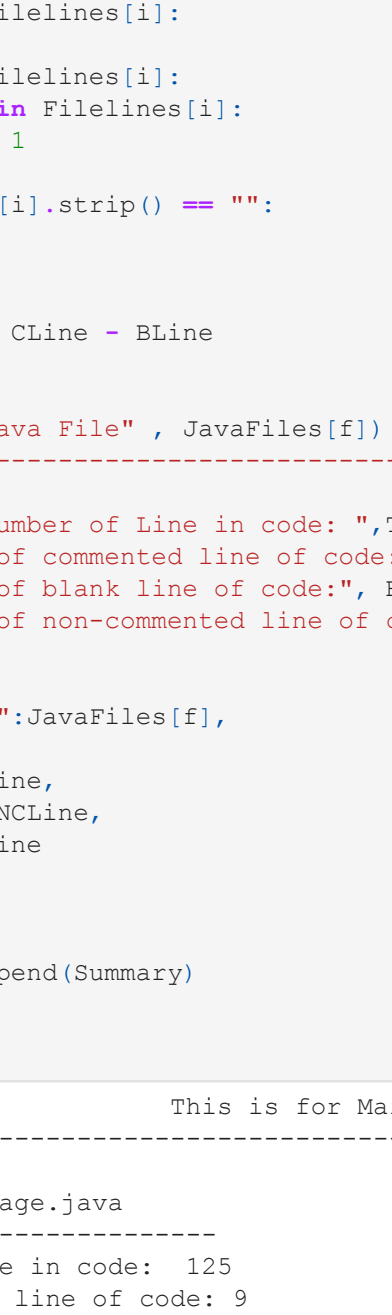
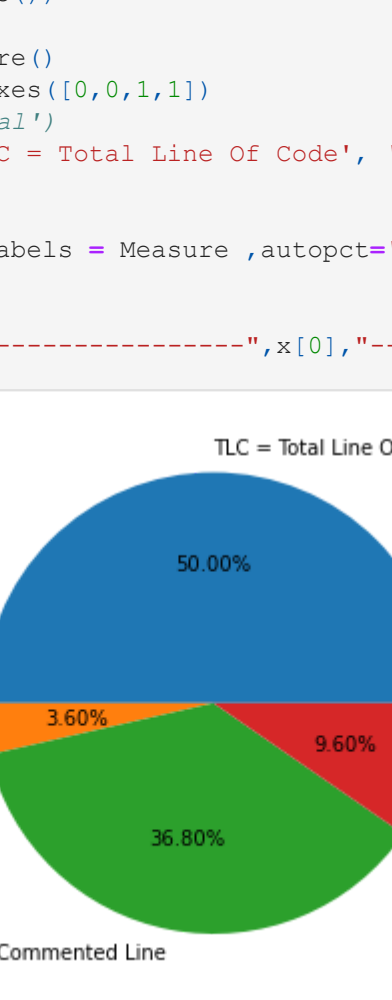
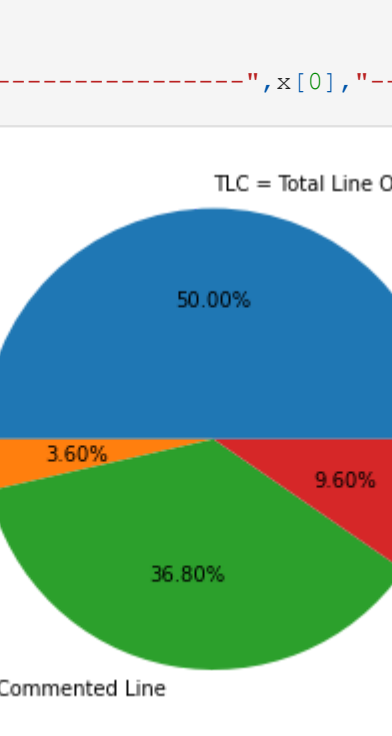


## Code Size

<b>Definition:</b>	
Total size, LOC (Effective Line of code)= NCLOC(Non Commented Line) + CLOC(Comented Line) **Measure Technique: Automated Program** Language : Java	
In [1]:	<pre>import os import pandas as pd  Files = os.listdir('ShopAssistant') Files</pre>
Out[1]:	<pre>['AddCostPage.java',  'LoginPage.java',  'CreateSalesInvoicePage.java',  'DailyIncomeCostPage.java',  'CreatePurchaseInvoicePage.java',  'AdvancedStockCheckPage.java',  'HomePage.java',  'DueCheckPage.java',  'StaffAttendancePage.java',  'SettingsPage.java',  'StockCheckPage.java']</pre>
In [2]:	<pre>JavaFiles = [] for files in Files:     if files.endswith(".java"):         JavaFiles.append(files)</pre> <p>JavaFiles</p>
Out[2]:	<pre>['AddCostPage.java',  'LoginPage.java',  'CreateSalesInvoicePage.java',  'DailyIncomeCostPage.java',  'CreatePurchaseInvoicePage.java',  'AdvancedStockCheckPage.java',  'HomePage.java',  'DueCheckPage.java',  'StaffAttendancePage.java',  'SettingsPage.java',  'StockCheckPage.java']</pre>
In [3]:	<pre>len(JavaFiles)</pre>
Out[3]:	11
In [8]:	<pre>print("----- This is for ShopAssistant Java Files -----") FinalResult = []  for f in range(len(JavaFiles)):      file = open(JavaFiles[f], "r")      CLine = 0     NCLine = 0     BLine = 0     TLC = 0      Filelines = []      for line in file:         TLC += 1         Filelines.append(line)      for i in range(TLC):         if '/' in Filelines[i]:             CLine += 1         elif '*' in Filelines[i]:             while '*' in Filelines[i]:                 CLine += 1                 i += 1             if Filelines[i].strip() == "":                 BLine += 1      NCLine = TLC - CLine - BLine     file.close()      print("\nFor Java File" , JavaFiles[f])     print("-----")      print("Total number of Line in code: ",TLC)     print("Number of commented line of code:", CLine)     print("Number of blank line of code:", BLine)     print("Number of non-commented line of code", NCLine)      Summary = {         "JavaFiles":JavaFiles[f],         "TLC":TLC,         "CLine":CLine,         "NCLine":NCLine,         "BLine":BLine     }     print(Summary)      FinalResult.append(Summary)</pre> <p>----- This is for ShopAssistant Java Files -----</p> <p>For Java File AddCostPage.java</p> <p>-----</p> <p>Total number of Line in code: 209 Number of commented line of code: 15 Number of blank line of code: 36 Number of non-commented line of code 158 {'JavaFiles': 'AddCostPage.java', 'TLC': 209, 'CLine': 15, 'NCLine': 158, 'BLine': 36}</p> <p>For Java File LoginPage.java</p> <p>-----</p> <p>Total number of Line in code: 108 Number of commented line of code: 9 Number of blank line of code: 16 Number of non-commented line of code 83 {'JavaFiles': 'LoginPage.java', 'TLC': 108, 'CLine': 9, 'NCLine': 83, 'BLine': 16}</p> <p>For Java File CreateSalesInvoicePage.java</p> <p>-----</p> <p>Total number of Line in code: 98 Number of commented line of code: 12 Number of blank line of code: 13 Number of non-commented line of code 73 {'JavaFiles': 'CreateSalesInvoicePage.java', 'TLC': 98, 'CLine': 12, 'NCLine': 73, 'BLine': 13}</p> <p>For Java File DailyIncomeCostPage.java</p> <p>-----</p> <p>Total number of Line in code: 348 Number of commented line of code: 24 Number of blank line of code: 56 Number of non-commented line of code 268 {'JavaFiles': 'DailyIncomeCostPage.java', 'TLC': 348, 'CLine': 24, 'NCLine': 268, 'BLine': 56}</p> <p>For Java File CreatePurchaseInvoicePage.java</p> <p>-----</p> <p>Total number of Line in code: 76 Number of commented line of code: 12 Number of blank line of code: 11 Number of non-commented line of code 53 {'JavaFiles': 'CreatePurchaseInvoicePage.java', 'TLC': 76, 'CLine': 12, 'NCLine': 53, 'BLine': 11}</p> <p>For Java File AdvancedStockCheckPage.java</p> <p>-----</p> <p>Total number of Line in code: 316 Number of commented line of code: 18 Number of blank line of code: 54 Number of non-commented line of code 244 {'JavaFiles': 'AdvancedStockCheckPage.java', 'TLC': 316, 'CLine': 18, 'NCLine': 244, 'BLine': 54}</p> <p>For Java File HomePage.java</p> <p>-----</p> <p>Total number of Line in code: 298 Number of commented line of code: 18 Number of blank line of code: 51 Number of non-commented line of code 229 {'JavaFiles': 'HomePage.java', 'TLC': 298, 'CLine': 18, 'NCLine': 229, 'BLine': 51}</p> <p>For Java File DueCheckPage.java</p> <p>-----</p> <p>Total number of Line in code: 511 Number of commented line of code: 34 Number of blank line of code: 123 Number of non-commented line of code 354 {'JavaFiles': 'DueCheckPage.java', 'TLC': 511, 'CLine': 34, 'NCLine': 354, 'BLine': 123}</p> <p>For Java File StaffAttendancePage.java</p> <p>-----</p> <p>Total number of Line in code: 382 Number of commented line of code: 31 Number of blank line of code: 75 Number of non-commented line of code 276 {'JavaFiles': 'StaffAttendancePage.java', 'TLC': 382, 'CLine': 31, 'NCLine': 276, 'BLine': 75}</p> <p>For Java File SettingsPage.java</p> <p>-----</p> <p>Total number of Line in code: 620 Number of commented line of code: 44 Number of blank line of code: 105 Number of non-commented line of code 471 {'JavaFiles': 'SettingsPage.java', 'TLC': 620, 'CLine': 44, 'NCLine': 471, 'BLine': 105}</p> <p>For Java File StockCheckPage.java</p> <p>-----</p> <p>Total number of Line in code: 173 Number of commented line of code: 15 Number of blank line of code: 33 Number of non-commented line of code 125 {'JavaFiles': 'StockCheckPage.java', 'TLC': 173, 'CLine': 15, 'NCLine': 125, 'BLine': 33}</p>
In [6]:	<pre>FinalResult</pre>
Out[6]:	<pre>[{'JavaFiles': 'AddCostPage.java',  'TLC': 209,  'CLine': 15,  'NCLine': 158,  'BLine': 36},  {'JavaFiles': 'LoginPage.java',  'TLC': 108,  'CLine': 9,  'NCLine': 83,  'BLine': 16},  {'JavaFiles': 'CreateSalesInvoicePage.java',  'TLC': 98,  'CLine': 12,  'NCLine': 73,  'BLine': 13},  {'JavaFiles': 'DailyIncomeCostPage.java',  'TLC': 348,  'CLine': 24,  'NCLine': 268,  'BLine': 56},  {'JavaFiles': 'CreatePurchaseInvoicePage.java',  'TLC': 76,  'CLine': 12,  'NCLine': 53,  'BLine': 11},  {'JavaFiles': 'AdvancedStockCheckPage.java',  'TLC': 316,  'CLine': 18,  'NCLine': 244,  'BLine': 54},  {'JavaFiles': 'HomePage.java',  'TLC': 298,  'CLine': 18,  'NCLine': 229,  'BLine': 51},  {'JavaFiles': 'DueCheckPage.java',  'TLC': 511,  'CLine': 34,  'NCLine': 354,  'BLine': 123},  {'JavaFiles': 'StaffAttendancePage.java',  'TLC': 382,  'CLine': 31,  'NCLine': 276,  'BLine': 75},  {'JavaFiles': 'SettingsPage.java',  'TLC': 620,  'CLine': 44,  'NCLine': 471,  'BLine': 105},  {'JavaFiles': 'StockCheckPage.java',  'TLC': 173,  'CLine': 15,  'NCLine': 125,  'BLine': 33}]</pre>
In [7]:	<pre>import matplotlib.pyplot as plt  for i in FinalResult:     x=list(i.values())      fig = plt.figure()     ax = fig.add_axes([0,0,1,1])     # ax.axes('equal')     Measure = ["TLC = Total Line Of Code", 'CLine = Commented Line', 'NCLine = Non Commented Line', 'BLine = Blank Line']     Data = x[1:]     ax.pie(Data, labels = Measure , autopct='%1.2f%%')     plt.show()      print("-----",x[0],"-----")</pre>
	
<p>----- AddCostPage.java -----</p> 	
<p>----- LoginPage.java -----</p> 	
<p>----- CreateSalesInvoicePage.java -----</p> 	
<p>----- DailyIncomeCostPage.java -----</p> 	
<p>----- CreatePurchaseInvoicePage.java -----</p> 	
<p>----- AdvancedStockCheckPage.java -----</p> 	
<p>----- HomePage.java -----</p> 	
<p>----- DueCheckPage.java -----</p>	
<p>----- StaffAttendancePage.java -----</p>	
<p>----- SettingsPage.java -----</p>	
<p>----- StockCheckPage.java -----</p>	
In [15]:	<pre>Files = os.listdir('Templates') Files  JavaFiles = [] for files in Files:     if files.endswith(".java"):         JavaFiles.append(files)</pre> <p>JavaFiles</p> <pre>print("----- This is for Templates Java Files -----") print("-----") FinalResult = []  for f in range(len(JavaFiles)):      file = open(JavaFiles[f], "r")      CLine = 0     NCLine = 0     BLine = 0     TLC = 0      Filelines = []      for line in file:         TLC += 1         Filelines.append(line)      for i in range(TLC):         if '/' in Filelines[i]:             CLine += 1         elif '*' in Filelines[i]:             while '*' in Filelines[i]:                 CLine += 1                 i += 1             if Filelines[i].strip() == "":                 BLine += 1      NCLine = TLC - CLine - BLine     file.close()      print("\nFor Java File" , JavaFiles[f])     print("-----")      print("Total number of Line in code: ",TLC)     print("Number of commented line of code:", CLine)     print("Number of blank line of code:", BLine)     print("Number of non-commented line of code", NCLine)      Summary = {         "JavaFiles":JavaFiles[f],         "TLC":TLC,         "CLine":CLine,         "NCLine":NCLine,         "BLine":BLine     }     print(Summary)      FinalResult.append(Summary)</pre> <p>----- This is for Templates Java Files -----</p> <p>For Java File StartingTemplate.java</p> <p>-----</p> <p>Total number of Line in code: 76 Number of commented line of code: 14 Number of blank line of code: 16 Number of non-commented line of code 46 {'JavaFiles': 'StartingTemplate.java', 'TLC': 76, 'CLine': 14, 'NCLine': 46, 'BLine': 16}</p> <p>For Java File InvoiceGeneratorTemplate.java</p> <p>-----</p> <p>Total number of Line in code: 1001 Number of commented line of code: 74 Number of blank line of code: 135 Number of non-commented line of code 792 {'JavaFiles': 'InvoiceGeneratorTemplate.java', 'TLC': 1001, 'CLine': 74, 'NCLine': 792, 'BLine': 135}</p> <p>For Java File FrameSetup.java</p> <p>-----</p> <p>Total number of Line in code: 315 Number of commented line of code: 66 Number of blank line of code: 55 Number of non-commented line of code 194 {'JavaFiles': 'FrameSetup.java', 'TLC': 315, 'CLine': 66, 'NCLine': 194, 'BLine': 55}</p> <p>For Java File DashboardTemplate.java</p> <p>-----</p> <p>Total number of Line in code: 355 Number of commented line of code: 70 Number of blank line of code: 55 Number of non-commented line of code 230 {'JavaFiles': 'DashboardTemplate.java', 'TLC': 355, 'CLine': 70, 'NCLine': 230, 'BLine': 55}</p>
In [16]:	<pre>import matplotlib.pyplot as plt  for i in FinalResult:     x=list(i.values())      fig = plt.figure()     ax = fig.add_axes([0,0,1,1])     # ax.axes('equal')     Measure = ["TLC = Total Line Of Code", 'CLine = Commented Line', 'NCLine = Non Commented Line', 'BLine = Blank Line']     Data = x[1:]     ax.pie(Data, labels = Measure , autopct='%1.2f%%')     plt.show()      print("-----",x[0],"-----")</pre>
	
<p>----- StartingTemplate.java -----</p> 	
<p>----- InvoiceGeneratorTemplate.java -----</p> 	
<p>----- FrameSetup.java -----</p>	
<p>----- DashboardTemplate.java -----</p>	
In [17]:	<pre>Files = os.listdir('Main') Files  JavaFiles = [] for files in Files:     if files.endswith(".java"):         JavaFiles.append(files)</pre> <p>JavaFiles</p> <pre>print("----- This is for Main Java Files -----") print("-----") FinalResult = []  for f in range(len(JavaFiles)):      file = open(JavaFiles[f], "r")      CLine = 0     NCLine = 0     BLine = 0     TLC = 0      Filelines = []      for line in file:         TLC += 1         Filelines.append(line)      for i in range(TLC):         if '/' in Filelines[i]:             CLine += 1         elif '*' in Filelines[i]:             while '*' in Filelines[i]:                 CLine += 1                 i += 1             if Filelines[i].strip() == "":                 BLine += 1      NCLine = TLC - CLine - BLine     file.close()      print("\nFor Java File" , JavaFiles[f])     print("-----")      print("Total number of Line in code: ",TLC)     print("Number of commented line of code:", CLine)     print("Number of blank line of code:", BLine)     print("Number of non-commented line of code", NCLine)      Summary = {         "JavaFiles":JavaFiles[f],         "TLC":TLC,         "CLine":CLine,         "NCLine":NCLine,         "BLine":BLine     }     print(Summary)      FinalResult.append(Summary)</pre> <p>----- This is for Main Java Files -----</p> <p>For Java File MainPage.java</p> <p>-----</p> <p>Total number of Line in code: 125 Number of commented line of code: 9 Number of blank line of code: 24 Number of non-commented line of code 92 {'JavaFiles': 'MainPage.java', 'TLC': 125, 'CLine': 9, 'NCLine': 92, 'BLine': 24}</p>
In [18]:	<pre>import matplotlib.pyplot as plt  for i in FinalResult:     x=list(i.values())      fig = plt.figure()     ax = fig.add_axes([0,0,1,1])     # ax.axes('equal')     Measure = ["TLC = Total Line Of Code", 'CLine = Commented Line', 'NCLine = Non Commented Line', 'BLine = Blank Line']     Data = x[1:]     ax.pie(Data, labels = Measure , autopct='%1.2f%%')     plt.show()      print("-----",x[0],"-----")</pre>
	
<p>----- MainPage.java -----</p>	
In [ ]:	