10.1 - Monthly Sales

Write a Python program that collects monthly sales data from the user and stores it in a list. The program should then use matplotlib to plot the sales values as a pie chart. When plotting, specify the color of the pie slices using Purdue's retired secondary color palette shown in Table 1a. The pie chart should include a title, and every slice in the chart should be labeled with the name of the month it represents. Test your program with the data in Table 1b.

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Color Name	Hex Code		Month	Sales
CoalGray	4D4038	_	January	4000
MoonDustGray	BAA892		February	2000
EverTrueBlue	5B6870		March	5000
SlayterSkyBlue	6E99B4		April	3000
AmeliaSkyBlue	A3D6D7		May	4000
LandGrantGreen	085C11		June	6000
RossAdeGreen	849E2A		July	5000
CeleryBogGreen	C3BE0B		August	2000
SpringFestGreen	E9E45B	9	September	5000
OakenBucketBrown	6B4536		October	8000
BellTowerBrick	B46012		November	7000
MackeyOrange	FF9B1A		December	9000
(a)		-	(b)	

Table 1: (a) Purdue secondary colors and (b) test data for Exercise 10.1.

A sample run of the program and the resulting pie chart are shown below. Your program output and pie chart should exactly match the sample. User input in the sample run has been highlighted in Pappy's Purple to distinguish it from the program's output, but your user input does not need to be colored. Save the resulting figure as monthly_sales_login.pdf and save your Python program as monthly_sales_login.py, where login is your Purdue login. Then submit both of them along with a screenshot of a run of your program using the test data.

Prof. Cole - Fall 2022 1 of 2

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Terminal

$ python monthly_sales_login.py
Enter the sales for January: 4000
Enter the sales for February: 2000
Enter the sales for March: 5000
Enter the sales for April: 3000
Enter the sales for May: 4000
Enter the sales for June: 6000
Enter the sales for July: 5000
Enter the sales for August: 2000
Enter the sales for September: 5000
Enter the sales for October: 8000
Enter the sales for November: 7000
Enter the sales for December: 9000
```

Monthly Sales Values

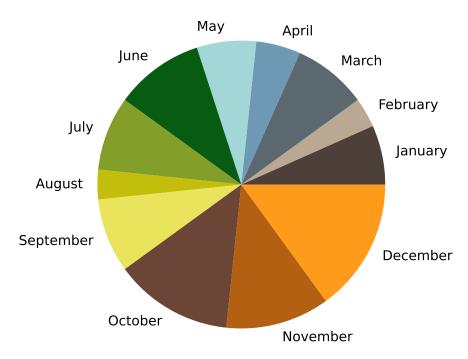


Figure 1: Sample monthly sales pie chart for Exercise 10.1.

Prof. Cole - Fall 2022 2 of 2