SOURCE CODE

HTML

```
<html>
    <title>Partner</title>
    <h1><b><center><head>MY PARTNER</head></center></b></h1>
    <body style='background-color:skyblue'></body> <body>

        </br>
        <h5><p>WELCOME DAVE !<p></h5>
        <p>This is a software in which you can easily view your</br> statistics
        of your goods. as you can see, there is hyperlink saying</br> "Ware-
        house" If you click this you can look at all your goods.</p>

        <p>If you wish to see your data i.e which goods are in high demand</br> and
        which are in not in a great demand as a graphical representaion you</br> go
        ahead click "Graphical Representaion" </br> this link will take you to a
        python enviornment!</p>

        <p>In case you wish to see the details i.e in statistic format</br>
        ( In number format - Profit and loss ) then feel free to click on</br>
        "Profit and Loss" this link will take you to a python environment.
        </p>
```

```
        <iframe
        src="https://trinket.io/embed/python/13ef42b01e?outputOnly=true"
        width="100%"




height="600" frameborder="0" marginwidth="0" marginheight="0"
allowfullscreen></iframe>

        <iframe src="https://trinket.io/embed/python/2cb7ffcd37?outputOnly=true"
width="100%" height="356" frameborder="0" marginwidth="0" marginheight="0"
allowfullscreen></iframe>

        <iframe
src="https://trinket.io/embed/python/a9976fd7db?outputOnly=true&runOption=run"
width="100%" height="600" frameborder="0" marginwidth="0" marginheight="0"
allowfullscreen></iframe>

    </body>

</html>
```

PYTHON

PYTHON - SQL Connect

```
#the lists

import mysql.connector as c
```

```
#MYSQL CONNECTOR
import random


list=['GROCERIES','FURNITURE','FIRSTAID','STATIONARY']
print("\n The list of GROCERIES \n")
GROCERIES=['apple','watermelon','soda','Milk','Bread','Cheese',
        'Cereals','Tomato sauce','Mustard','Salsa',
        'Hot pepper sauce','Eggs','Tofu','Butter',
        'Chocolate','Banana','Mango','Water','Potato']
db=c.connect(host='localhost',database='data',user='root',password='Welcome2MYSQL')
mc=db.cursor()
mc.execute("select*from groceries")
for i in mc:
   print(i)
print("\n The list of FURNITURE \n")
FURNITURE=['Armchair','stool','Bean Bag Chair','Bed','Bunk bed','Bookshelf',
        'Carpet','Cupboard','Couch','Cushion','Curtain','Desk','Desk Chair',
        'Grandfather Clock','Garden Bench',
        'Table','Hat Stand','Shelf','Rocking chair']
db=c.connect(host='localhost',database='data',user='root',password='Welcome2MYSQL')
mc=db.cursor()
mc.execute("select*from furniture")
```

```
for i in mc:
    print(i)
print("\n The list of FIRSTAID \n")
FIRSTAID=['Plaster','Gauze','Bandages','Safty pins','Gloves','Tweezers',
        'Scissors','Thermometer','Skin Rash
        Cream','Painkillers', 'Cough medicine','Eye wash','Sticky
        tape','Asprin', 'Antacid','Nasal Spray','Insect
        Repellent','Sunscreen', 'Mask']
db=c.connect(host='localhost',database='data',user='root',password='Welcome2MYSQL')
mc=db.cursor()
mc.execute("select*from firstaid")
for i in mc:
    print(i)
print("\n The list of STATIONARY \n")
STATIONARY=['Pens','Highlighter','Permanent Marker','Eraser','Pencil',
         'Pencil Sharpener','Ruler','Plain Paper','Glue',
         'Paper Clips','Sticky tape','Calculator','Utitity Knife',
         'Rubber Bands',
         'Stapeler','Envelope','WhiteBoard','Geometry Box','Scarpbook',
         'Wall hooks']
db=c.connect(host='localhost',database='data',user='root',password='Welcome2MYSQL')
mc=db.cursor()
```

```
mc.execute("select*from stationary")
for i in mc:
    print(i)



# alteration if required


print("do you want to make alterations to any of these lists")
print("if alterations are to be made please enter 1")
print("if alterations are not to be made please enter 2")
input_alt=int(input("please enter an input: "))
if input_alt==1:
    print("enter the name of the list to be altered")
    input_alt_ls=str(input("the list ~ "))
    if input_alt_ls=="groceries":
        print("enter the new item in groceries")
        input_alt_gr=str(input("~"))
        GROCERIES.append(input_alt_gr)
        print(GROCERIES)


    elif input_alt_ls=="furniture":
        print("enter the new item in furniture")
```

```
        input_alt_fr=str(input("~"))
        FURNITURE.append(input_alt_fr)
        print(FURNITURE)

    elif input_alt_ls=="firstaid":
        print("enter the new item in firstaid")
        input_alt_fa=str(input("~"))
        FIRSTAID.append(input_alt_fa)
        print(FIRSTAID)

    elif input_alt_ls=="stationary":
        print("enter the new item in stationary")
        input_alt_st=str(input("~"))
        STATIONARY.append(input_alt_st)
        print(STATIONARY)

    else:
        print("\na wrong entry has been made...moving onwards")
if input_alt==2:
    print("thank you, now moving forwards")

# recommendation code
```

```
print("\nhere are the list of items ")
ITEM_SOLD=input("INPUT THE RECENTLY SOLD ITEMS~ ")

if any(ITEM_SOLD in word for word in GROCERIES):
    GROCERIES=random.choice(GROCERIES)
    print("Do you want us to recommend a product to place on an offer ?")
    print("Please type : ")
    print("1 - to accept offer")
    print("2 - to decline offer : ")
    input_gr=int(input("Please Enter Input : "))
    if(input_gr==1):
        print("Here is our Product Recomndation : ",GROCERIES)
    elif(input_gr==2):
        print("No Problem Have a nice day")
    else:
        print("Please enter valid input")

elif any(ITEM_SOLD in word for word in FURNITURE):
    FURNITURE=random.choice(FURNITURE)
    print("Do you want us to recommend a product to place on an offer ?")
    print("Please type : ")
```

```
    print("1 - to accept offer")
    print("2 - to decline offer : ")
    input_fr=int(input("Please Enter Input : "))
    if(input_fr==1):
        print("Here is our Product Recomndation : ",FURNITURE)
    elif(input_fr==2):
        print("No Problem Have a nice day")
    else:
        print("Please enter valid input")


elif any(ITEM_SOLD in word for word in FIRSTAID):
    FIRSTAID=random.choice(FIRSTAID)
    print("Do you want us to recommend a product to place on an offer ?")
    print("Please type : ")
    print("1 - to accept offer")
    print("2 - to decline offer : ")
    input_fa=int(input("Please Enter Input : "))
    if(input_fa==1):
        print("Here is our Product Recomndation : ",FIRSTAID)
    elif(input_fa==2):
        print("No Problem Have a nice day")
    else:
```

```
        print("Please enter valid input")


elif any(ITEM_SOLD in word for word in STATIONARY):
    STATIONARY=random.choice(STATIONARY)
    print("Do you want us to recommend a product to place on an offer ?")
    print("Please type : ")
    print("1 - to accept offer")
    print("2 - to decline offer : ")
    input_st=int(input("Please Enter Input : "))
    if(input_st==1):
        print("Here is our Product Recomndation : ",STATIONARY)
    elif(input_st==2):
        print("No Problem Have a nice day")
    else:
        print("Please enter valid input")
```

Python Stacks

```
import random
import string
```

```
def get_random_string(length):
    letters = string.ascii_lowercase
    result_str = ''.join(random.choice(letters) for i in range(length))
    print("Random string of length", length, "is:", result_str)




from itertools import repeat
dict=['GROCERIES','FURNITURE','FIRSTAID','STATIONARY']


GROCERIES={'apple':'apple','watermelon':'watermelon','soda':'soda','Milk':'Milk','Bread':'Bread','Cheese':'Cheese',
        'Cereals':'Cereals','Tomato sauce':'Tomato sauce','Mustard':'Mustard','Salsa':'Salsa',
        'Hot pepper sauce':'Hot pepper sauce','Eggs':'Eggs','Tofu':'Tofu','Butter':'Butter',

'Chocolate':'Chocolate','Banana':'Banana','Mango':'Mango','Water':'Water','Potato':'Potato'}
FURNITURE={'Armchair':'Armchair','stool':'stool','Bean Bag Chair':'Bean Bag Chair','Bed':'Bed','Bunk bed':'Bunk bed','Bookshelf':'Bookshelf',

'Carpet':'Carpet','Cupboard':'Cupboard','Couch':'Couch','Cushion':'Cushion','Curtain':'Curtain','Desk':'Desk','Desk Chair':'Desk Chair',
        'Grandfather Clock':'Grandfather Clock','Garden Bench':'Garden Bench',
        'Table':'Table','Hat Stand':'Hat Stand','Shelf':'Shelf','Rocking chair':'Rocking chair'}
```

```
FIRSTAID={'Plaster':'Plaster','Gauze':'Gauze','Bandages':'Bandages','Safty pins':'Safty
pins','Gloves':'Gloves','Tweezers':'Tweezers',

        'Scissors':'Scissors','Thermometer':'Thermometer','Skin Rash Cream':'Skin Rash
Cream','Painkillers':'Painkillers',

        'Cough medicine':'Cough medicine','Eye wash':'Eye wash','Sticky tape':'Sticky
tape','Asprin':'Asprin',

        'Antacid':'Antacid','Nasal Spray':'Nasal Spray','Insect
Repellent':'Insect Repellent','Sunscreen':'Sunscreen',

        'Mask':'Mask'}

STATIONARY={'Pens':'Pens','Highlighter':'Highlighter','Permanent
Marker':'Permanent Marker','Eraser':'Eraser','Pencil':'Pencil',

         'Pencil Sharpener':'Pencil Sharpener','Ruler':'Ruler','Plain Paper':'Plain
Paper','Glue':'Glue',

        'Paper Clips':'Paper Clips','Sticky tape':'Sticky tape','Calculator':'Calculator','Utitity
Knife':'Utitity Knife',

         'Rubber Bands':'Rubber Bands',

        'Stapeler':'Stapeler','Envelope':'Envelope','WhiteBoard':'WhiteBoard','Geometry
Box':'Geometry Box','Scarpbook':'Scarpbook',

        'Wall hooks':'Wall hooks'}



for i in repeat(None,100):

   print("do you wish to create a produce database")

   i=input()

   if i=="yes":
```

```
print("which item do you want to keep a record of?")
l=input()
if any(l in word for word in GROCERIES):
   print("enter a number ")
   result_str=input()

elif any(l in word for word in FURNITURE):
   print("enter a number ")
   result_str=input()
elif any(l in word for word in FIRSTAID):
   print("enter a number ")
   result_str=input()
elif any(l in word for word in STATIONARY):
   print("enter a number ")
   result_str=input()
else:
   print("invalid input")
   break
z=l
f={z:result_str}
print(f)
```

```
    elif i=="no":
        print("ok")
        break
print("thank you")
```

Python Plot

```
import random
import numpy as np
import matplotlib.pyplot as plt



list=['GROCERIES','FURNITURE','FIRSTAID','STATIONARY']
GROCERIES=['apple','watermelon','soda','Milk','Bread','Cheese',
          'Cereals','Tomato sauce','Mustard','Salsa',
          'Hot pepper sauce','Eggs','Tofu','Butter',
          'Chocolate','Banana','Mango','Water','Potato']
FURNITURE=['Armchair','stool','Bean Bag Chair','Bed','Bunk bed','Bookshelf',
          'Carpet','Cupboard','Couch','Cushion','Curtain','Desk','Desk Chair',
          'Grandfather Clock','Garden Bench',
          'Table','Hat Stand','Shelf','Rocking chair']
FIRSTAID=['Plaster','Gauze','Bandages','Safty pins','Gloves','Tweezers',
         'Scissors','Thermometer','Skin Rash Cream','Painkillers',
         'Cough medicine','Eye wash','Sticky tape','Asprin',
```

```
        'Antacid','Nasal Spray','Insect Repellent','Sunscreen',
        'Mask']
STATIONARY=['Pens','Highlighter','Permanent Marker','Eraser','Pencil',
         'Pencil Sharpener','Ruler','Plain Paper','Glue',
         'Paper Clips','Sticky tape','Calculator','Utitity Knife',
         'Rubber Bands',
         'Stapeler','Envelope','WhiteBoard','Geometry Box','Scarpbook',
         'Wall hooks']


for i in range(0,100):
   g=0
   f=0
   fa=0
   s=0
   ITEM_SOLD=input("INPUT THE RECENTLY SOLD ITEMS~ ")


   if any(ITEM_SOLD in word for word in GROCERIES):
      g=g+1


   elif any(ITEM_SOLD in word for word in FURNITURE):
      f=f+1


   elif any(ITEM_SOLD in word for word in FIRSTAID):
```

```
        fa=fa+1


    elif any(ITEM_SOLD in word for word in STATIONARY):
        s=s+1
    else:
        break
    print(g,f,fa,s)


data = {'groceries':g, 'furniture':f, 'firstaid':fa,
        'stationary':s}
courses = list(data.keys())
values = list(data.values())


fig = plt.figure(figsize = (10, 5))


plt.bar(courses, values, color ='maroon',
        width = 0.4)


plt.xlabel("amount sold")
plt.ylabel("category")
plt.title("table")
plt.show()
```

EXPLANATION OF CODE

ALGORITHM

SQL Python connector

Step 1

Import mysql.connector as c

Step 2

Import random into the script

Step 3

Create a list called 'list' with elements 'GROCERIES', 'FURNITURE', 'FIRSTAID', 'STATIONARY'

Step 4

Print the list of groceries

Step 5

Use db as c.connect with the host as 'localhost',database as 'data' and user as 'root' password with the password to the mysql application

Step 6

Use mc=db.cursor()

Step 7

Use mc.execute("select*from groceries")

Step 8

Use for i in mc print i

Step 9

Print the list of furniture

Step 10

Use db as c.connect with the host as 'localhost',database as 'data' and user as 'root' password with the password to the mysql application

Step 11

Use mc=db.cursor()

Step 12

Use mc.execute("select*from furniture")

Step 13

Use for i in mc print i

Step 14

Print the list of firstaid

Step 15

Use db as c.connect with the host as 'localhost',database as 'data' and user as 'root'password with the password to the mysql application

Step 16

Use mc=db.cursor()

Step 17

Use mc.execute("select*from firstaid")

Step 18

Use for i in mc print i

Step 19

Print the list of stationary

Step 20

Use db as c.connect with the host as 'localhost',database as 'data' and user as ‘root' password with the password to the mysql application

Step 21

Use mc=db.cursor()

Step 22

Use mc.execute("select*from stationary")

Step 23

Use for i in mc print i

Step 24

Print the statement if the user would want to make alterations to any of these lists

Step 25

Print the statements if alterations are to be made please enter 1 and if alterations are not to be made please enter 2

Step 25.1

If the input is 1

Step 25.1.1

Request the user to enter the name of the list that is to be altered Step 25.1.2

If the item is in the list groceries then request the user to enter the new item

Step 25.1.3

Append the list with the new item entered

Step 25.1.4

If an incorrect entry is made then display an error message

Step 25.2

If the input is 2

Step 25.2.1

Print the statement thank you, now moving forwards

Step 26

Ask the user for any recently sold items

Step 27

Traverse the item inputted in the four lists to find the list in which the item resides

inside Step 28

Using random.choice select a random item inside the list to get an

item Step 29

Ask the user if they would like a product recommended for them

Step 30

If input is true then display the item that is randomly selected from within the list of items.

Step 31

If input is false then print the line 'No Problem Have a nice day'

SQL

STEP 1:

Create database Data;.

STEP2:

Create table Groceries(GroceriesNo int (10),GrocerName varchar(50),Quatity int(50),Primary Key (GroceriesNo));

STEP 3:

Insert into Groceries values(001,'Apple',20);

STEP 4:

Insert into Groceries values(002,'Watermelons',7);

STEP 5:

Insert into Groceries values(003,'Soda',13);

STEP 6:

Insert into Groceries values(004,'Milk',16);

STEP 7:

```
        Insert into Groceries values(005,'Bread',12);
STEP 8:
        Insert into Groceries values(006,'Cheese',8);
STEP 9:
        Insert into Groceries values(008,'Cereals',12);
STEP 10:
        Insert into Groceries values(009,'Tomato sauce',15);
STEP 11:
        Insert into Groceries values(010,'Mustard',10);
STEP 12:
        Insert into Groceries values(011,'Salsa',5);
STEP 13:
        Insert into Groceries values(012,'Hot pepper sauce',8);
STEP 14:
        Insert into Groceries values(013,'Eggs',24);
STEP 15:
        Insert into Groceries values(014,'Tofu',11);
STEP 16:
        Insert into Groceries values(015,'Butter',18);
STEP 17:
        Insert into Groceries values(016,'Chocolate',20);
STEP 18:
        Insert into Groceries values(017,'Banana',22);
STEP 19:
        Insert into Groceries values(018,'Mango',20);
STEP 20:
        Insert into Groceries values(019,'Water',25);
STEP 21:
        Insert into Groceries values(020,'Potato',18);
STEP 22:
        Create table Furniture(FurnitureNo int(10), FurnitureName
        varchar(50),Quantity int(10),Primary Key(FurnitureNo));

STEP 23:
        Insert into Furniture values(001,'Armchair',20);
```

STEP 24:

Insert into Furniture values(002,'stool',25);

STEP 25:

Insert into Furniture values(003,'Bean Bag Chair',8);

STEP 26:

Insert into Furniture values(004,'Bed',15);

STEP 27:

Insert into Furniture values(005,'Bunk bed',6);

STEP 28:

Insert into Furniture values(006,'Bookshelf',10);

STEP 29:

Insert into Furniture values(007,'Carpet',6);

STEP30:

Insert into Furniture values(008,'Cupboard',8);

STEP 31:

Insert into Furniture values(009,'Couch',10);

STEP 32:

Insert into Furniture values(010,'Cushion',12);

STEP 33:

Insert into Furniture values(012,'Curtain',13);

STEP 34:

Insert into Furniture values(013,'Desk',16);

STEP 35:

Insert into Furniture values(014,'Desk Chair',20);

STEP 36:

Insert into Furniture values(015,'Grandfather Clock',3);

STEP 37:

Insert into Furniture values(016,'Garden Bench',5); STEP 38:

Insert into Furniture values(017,'Table',14);

STEP 39:

Insert into Furniture values(018,'Hat Stand',8);

STEP 40:

Insert into Furniture values(019,'Shelf',15);

STEP 41:

```
        Insert into Furniture values(020,'Rocking chair',9);
STEP 42:
        Create table FirstAid(FirstAidNo int(10),FirstAidItem varchar(50),Quantity
        int(10),Primary Key(FirstAidNo));
STEP 43:
        Insert into FirstAid values(001,'Plaster',14);
STEP 44:
        Insert into FirstAid values(002,'Gauze',15);
STEP 45:
        Insert into FirstAid values(003,'Bandages',22);



STEP 46:
        Insert into FirstAid values(004,'Safty pins',25);
STEP 47:
        Insert into FirstAid values(005,'Gloves',15);
STEP 48:
        Insert into FirstAid values(006,'Tweezers',16);
STEP 49:
        Insert into FirstAid values(007,'Scissors',15);
STEP 50:
        Insert into FirstAid values(008,'Thermometer',18);
STEP 51:
        Insert into FirstAid values(009,'Skin Rash Cream',14);
STEP 52:
        Insert into FirstAid values(010,'Painkillers',16);
STEP 53:
        Insert into FirstAid values(011,'Cough medicine',12);
STEP 54:
        Insert into FirstAid values(013,'Eye wash',10);
STEP 55:
        Insert into FirstAid values(014,'Sticky tape',11);
STEP 56:
        Insert into FirstAid values(015,'Asprin',13);
```

STEP 57:

Insert into FirstAid values(016,'Antacid',17);

STEP 58:

Insert into FirstAid values(017,'Nasal Spray',15);

STEP 59:

Insert into FirstAid values(018,'Insect Repellent',18);

STEP 60:

Insert into FirstAid values (019,'Sunscreen',15);

STEP 61:

Insert into FirstAid values(020,'Mask',20);

STEP 62:

Create table stationary(StationaryNo int(10),StationaryName varchar(50),Quantity int(10),Primary Key(StationaryNo));

STEP 63:

Insert into stationary values(001,'Pens',22);

STEP 64:

Insert into stationary values(002,'Highlighter',20);

STEP 65:

Insert into stationary values(003,'Permanent Marker',18);

STEP 66:

Insert into stationary values(004,'Eraser',19);

STEP 67:

Insert into stationary values(005,'Pencil',25);

STEP 68:

Insert into stationary values(006,'Pencil Sharpener',20);

STEP 69:

Insert into stationary values(007,'Ruler',20);

STEP 70:

Insert into stationary values(008,'Plain Paper',25);

STEP 71:

Insert into stationary values(009,'Glue',19);

STEP 72:

Insert into stationary values(010,'Paper Clips',20); STEP 73:

Insert into stationary values(011,'Sticky tape',15);

STEP 74:

Insert into stationary values(012,'Calculator',10);

STEP 75:

Insert into stationary values(013,'Utitity Knife',13); STEP 76:

Insert into stationary values(014,'Rubber Bands',20); STEP 77:

Insert into stationary values(015,'Stapeler',16);

STEP 78:

Insert into stationary values(016,'Envelope',19);

STEP 79:

Insert into stationary values(017,'WhiteBoard',10);

STEP 80:

Insert into stationary values(018,'Geometry Box',13);

STEP 81:

Insert into stationary values(019,'Scarpbook',14);

STEP 82:

Insert into stationary values(020,'Wall hooks',21);

Python Plot

Step 1:

Import random

Step 2 :

Import numpy as np

Step 3:

Import mathplotlib.pyplot as plt

Step 4:

Use from itertools import repeat

Step 4:

Create a list with the elements 'GROCERIES', 'FURNITURE', 'FIRSTAID', 'STATIONARY'

Step 5:

Create the list called 'GROCERIES' with all the elements inside of it

Step 6:

Create the list called 'FURNITURE' with all the elements inside of it

Step 7:

Create the list called 'FIRSTAID' with all the elements inside of it

Step 8:

Create the list called 'STATIONARY' with all the elements inside of it

Step 9:

Assing the value 0 to the variables g,f,fa,s

Step 10:

Ask the user to input a recently sold item

Step 11:

If the item was sold in groceries

Step 11.1:

Change the value of g to add 1

Step 12:

If the item was sold in furniture

Step 12.1:

Change the value of f to add 1

Step 13:

If the item was sold in first aid

Step 13.1:

Change the value of fa to add 1

Step 14:

If the item was sold in stationary

Step 14.1:

Change the value of s to add 1

Step 15:

If an incorrect value is entered then break

Step 16:

Create a dictionary called data in which the keys are the elemnts of 'list' and the values are a,f,fa,s

Step 17:

Define 'courses' as list with elements as the keys of the dictionary data

Step 18:

Define 'values' as list with elements as the values of the dictionary data

Step 19:

Use plt.bar to plot the bar graph with the color maroon and width of 0.4

Step 20:

use plt.xlabel , plt.ylabel and plt.title to name the x-axis as amount sold, y-axis as category and the title as table

Python Stacks

Step 1:

Import random

Step 2:

Import string

Step 3:

Import repeat from itertools

Step 4:

Define get_random_string(length)

Step 4.1:

Define 'letters' as string.ascii_lowercase to only generate lowercase letters

Step 4.2:

Create 'result_str' using join and random.choice for i in the lenght of the string

Step 4.3:

Print "Random string of length" with the length and the randomly created string

Step 5:

Create a list called 'dict' with the elements 'GROCERIES', 'FURNITURE', 'FIRSTAID', 'STATIONARY

Step 6:

Create a dictionary called 'GROCERIES' with its keys and values

Step 7:

Create a dictionary called 'FURNITURE' with its keys and values

Step 8:

Create a dictionary called 'FIRSTAID' with its keys and values

Step 9:

Create a dictionary called 'STATIONARY' with its keys and values

Step 10:

Use repeat function to loop the code

Step 11:

Print the statement 'do you wish to create a produce database'

Step 11.1:

If the input is 'yes'

Step 11.1.1:

Display the line 'which item do you want to keep a record of?'

Step 11.1.2:

Traverse the list to find the element inputted by the user

Step 11.1.3:

Ask the user for the number

Step 11.1.4:

Create a dictionary called f to save the inputted data

Step 11.2:

If input is 'no'

Step 11.2.1:

Print the statement 'thank you'

Python Plot

Step 1 :

Import random

Step 2 :

Import numpy as np

Step 3 :

Import mathplotlib.pyplot as plt

Step 4 :

Use from itertools import repeat

Step 5 :

Create a list with the elements 'GROCERIES', 'FURNITURE', 'FIRSTAID', 'STATIONARY'

Step 6:

Create the list called 'GROCERIES' with all the elements inside of it

Step 7:

Create the list called 'FURNITURE' with all the elements inside of it

Step 8 :

Create the list called 'FIRSTAID' with all the elements inside of it

Step 9 :

Create the list called 'STATIONARY' with all the elements inside of it

Step 10:

Assign the value 0 to the variables g,f,fa,s

Step 11 :

Ask the user to input a recently sold item

Step 12:

If the item was sold in groceries

Step 12.1:

Change the value of g to add 1

Step 13:

If the item was sold in furniture

Step 13.1:

Change the value of f to add 1

Step 14:

If the item was sold in first aid

Step 14.1:

Change the value of fa to add 1

Step 15 :

If the item was sold in stationary

Step 15.1 :

Change the value of s to add 1

Step 16:

If an incorrect value is entered then break

Step 17:

Create a dictionary called data in which the keys are the elements of 'list' and the values are a,f,fa,s

Step 18 :

Define 'courses' as list with elements as the keys of the dictionary data

Step 19 :

Define 'values' as list with elements as the values of the dictionary data

Step 20:

Use plt.bar to plot the bar graph with the color maroon and width of 0.4

Step 21:

use plt.xlabel , plt.ylabel and plt.title to name the x-axis as amount sold, y-axis as category and the title as table

Python Plot

Step 1 :

Import random

Step 2 :

Import numpy as np

Step 3 :

Import mathplotlib.pyplot as plt

Step 4 :

Use from itertools import repeat

Step 4 :

Create a list with the elements 'GROCERIES', 'FURNITURE', 'FIRSTAID', 'STATIONARY'

Step 5 :

Create the list called 'GROCERIES' with all the elements inside of it

Step 6 :

Create the list called 'FURNITURE' with all the elements inside of it

Step 7 :

Create the list called 'FIRSTAID' with all the elements inside of it

Step 8 :

Create the list called 'STATIONARY' with all the elements inside of it

Step 9 :

Assign the value 0 to the variables g,f,fa,s

Step 10:

Ask the user to input a recently sold item

Step 11:

If the item was sold in groceries

Step 11.1:

Change the value of g to add 1

Step 12 :

If the item was sold in furniture

Step 12.1 :

Change the value of f to add 1

Step 13 :

If the item was sold in first aid

Step 13.1:

Change the value of fa to add 1

Step 14 :

If the item was sold in stationary

Step 14.1 :

Change the value of s to add 1

Step 15 :

If an incorrect value is entered then break

Step 16 :

Create a dictionary called data in which the keys are the elements of 'list' and the values are a,f,fa,s

Step 17 :

Define 'courses' as list with elements as the keys of the dictionary data

Step 18:

Define 'values' as list with elements as the values of the dictionary data

Step 19:

Use plt.bar to plot the bar graph with the color maroon and width of 0.4

Step 20:

use plt.xlabel , plt.ylabel and plt.title to name the x-axis as amount sold, y-axis as category and the title as table.

PARTNER PROGRAM OUTPUTS

MY PARTNER

WELCOME DAVE !

This is a software in which you can easily view your
statistics of your goods. as you can see, there is hyperlink saying
"Ware-house" If you click this you can look at all your goods.

If you wish to see your data i.e which goods are in high demand
and which are in not in a great demand as a graphical representaion you
go ahead click "Graphical Representaion"
this link will take you to a python enviornment!

In case you wish to see the details i.e in statistic format
(In number format - Profit and loss) then feel free to click on
"Profit and Loss" this link will take you to a python environment.

In case you wish to see the details i.e in statistic format
(In number format - Profit and loss) then feel free to click on
"Profit and Loss" this link will take you to a python environment.

trinket ▶ Run

```
Powered by trinket
('Here Is A Random Category We Could Provide For You : ', 'stationary')
Do you want us to recommend a product to place on an offer ?
Please type :
1 - to accept offer
2 - to decline offer :
Please Enter Input :  1
('Here is our Product Recomndation : ', 'Glue')
```

```
Powered by trinket
('Here Is A Random Category We Could Provide For You : ', 'groceries')
Do you want us to recommend a product to place on an offer ?
Please type :
1 - to accept offer
2 - to decline offer :
Please Enter Input :  2
No Problem Have a nice day
```

```
Powered by trinket
('groceries', ['apple', 'watermelon', 'soda', 'Milk', 'Bread', 'Cheese', 'Cereals', 'Tomato sauce', 'Mustard', 'Salsa', 'Hot pepper sauce', 'Eggs', 'Tofu', 'Butter',
'Chocolate', 'Banana', 'Mango', 'Water', 'Potato'])
('furniture', ['Armchair', 'stool', 'Bean Bag Chair', 'Bed', 'Bunk bed', 'Bookshelf', 'Carpet', 'Cupboard', 'Couch', 'Cushion', 'Curtain', 'Desk', 'Desk Chair',
'Grandfather Clock', 'Garden Bench', 'Table', 'Hat Stand', 'Shelf', 'Rocking chair'])
('first aid', ['Plaster', 'Gauze', 'Bandages', 'Safty pins', 'Gloves', 'Tweezers', 'Scissors', 'Thermometer', 'Skin Rash Cream', 'Painkillers', 'Cough medicine',
'Eye wash', 'Sticky tape', 'Asprin', 'Antacid', 'Nasal Spray', 'Insect Repellent', 'Sunscreen', 'Mask'])
('stationary', ['Pens', 'Highlighter', 'Permanent Marker', 'Eraser', 'Pencil', 'Pencil Sharpener', 'Ruler', 'Plain Paper', 'Glue', 'Paper Clips', 'Sticky tape',
'Calculator', 'Utitity Knife', 'Rubber Bands', 'Stapeler', 'Envelope', 'WhiteBoard', 'Geometry Box', 'Scarpbook', 'Wall hooks'])
here are the list of items INPUT THE RECENTLY SOLD ITEMS Cereals
Do you want us to recommend a product to place on an offer ?
Please type :
1 - to accept offer
2 - to decline offer :
Please Enter Input :  1
('Here is our Product Recomndation : ', 'Hot pepper sauce')
```

trinket ▶ Run

Powered by trinket

```
('\ngroceries are ~ \n ', ['apple', 'watermelon', 'soda', 'Milk', 'Bread', 'Cheese', 'Cereals', 'Tomato sauce', 'Mustard', 'Salsa', 'Hot pepper sauce', 'Eggs',
'Tofu', 'Butter', 'Chocolate', 'Banana', 'Mango', 'Water', 'Potato'])
('\nfurniture are ~ \n ', ['Armchair', 'stool', 'Bean Bag Chair', 'Bed', 'Bunk bed', 'Bookshelf', 'Carpet', 'Cupboard', 'Couch', 'Cushion', 'Curtain', 'Desk', 'Desk
Chair', 'Grandfather Clock', 'Garden Bench', 'Table', 'Hat Stand', 'Shelf', 'Rocking chair'])
('\nfirst aid are ~ \n ', ['Plaster', 'Gauze', 'Bandages', 'Safty pins', 'Gloves', 'Tweezers', 'Scissors', 'Thermometer', 'Skin Rash Cream', 'Painkillers', 'Cough
medicine', 'Eye wash', 'Sticky tape', 'Asprin', 'Antacid', 'Nasal Spray', 'Insect Repellent', 'Sunscreen', 'Mask'])
('\nstationary are ~ \n ', ['Pens', 'Highlighter', 'Permanent Marker', 'Eraser', 'Pencil', 'Pencil Sharpener', 'Ruler', 'Plain Paper', 'Glue', 'Paper Clips', 'Sticky
tape', 'Calculator', 'Utitity Knife', 'Rubber Bands', 'Stapeler', 'Envelope', 'WhiteBoard', 'Geometry Box', 'Scarpbook', 'Wall hooks'])
do u want to make alterations to any of these lists
if alterations are to be made please enter 1
if alterations are not to be made please enter 2
please enter an input:  1
enter the name of the list to be altered
the list ~  groceries
enter the new item in groceries
~ soda
['apple', 'watermelon', 'soda', 'Milk', 'Bread', 'Cheese', 'Cereals', 'Tomato sauce', 'Mustard', 'Salsa', 'Hot pepper sauce', 'Eggs', 'Tofu', 'Butter', 'Chocolate',
'Banana', 'Mango', 'Water', 'Potato', 'soda']
```

trinket ▶ Run

Powered by trinket

```
('\ngroceries are ~ \n ', ['apple', 'watermelon', 'soda', 'Milk', 'Bread', 'Cheese', 'Cereals', 'Tomato sauce', 'Mustard', 'Salsa', 'Hot pepper sauce', 'Eggs',
'Tofu', 'Butter', 'Chocolate', 'Banana', 'Mango', 'Water', 'Potato'])
('\nfurniture are ~ \n ', ['Armchair', 'stool', 'Bean Bag Chair', 'Bed', 'Bunk bed', 'Bookshelf', 'Carpet', 'Cupboard', 'Couch', 'Cushion', 'Curtain', 'Desk', 'Desk
Chair', 'Grandfather Clock', 'Garden Bench', 'Table', 'Hat Stand', 'Shelf', 'Rocking chair'])
('\nfirst aid are ~ \n ', ['Plaster', 'Gauze', 'Bandages', 'Safty pins', 'Gloves', 'Tweezers', 'Scissors', 'Thermometer', 'Skin Rash Cream', 'Painkillers', 'Cough
medicine', 'Eye wash', 'Sticky tape', 'Asprin', 'Antacid', 'Nasal Spray', 'Insect Repellent', 'Sunscreen', 'Mask'])
('\nstationary are ~ \n ', ['Pens', 'Highlighter', 'Permanent Marker', 'Eraser', 'Pencil', 'Pencil Sharpener', 'Ruler', 'Plain Paper', 'Glue', 'Paper Clips', 'Sticky
tape', 'Calculator', 'Utitity Knife', 'Rubber Bands', 'Stapeler', 'Envelope', 'WhiteBoard', 'Geometry Box', 'Scarpbook', 'Wall hooks'])
do u want to make alterations to any of these lists
if alterations are to be made please enter 1
if alterations are not to be made please enter 2
please enter an input:  2
thank you, now moving forwards

here are the list of items
INPUT THE RECENTLY SOLD ITEMS~  Envelope
Do you want us to recommend a product to place on an offer ?
Please type :
1 - to accept offer
2 - to decline offer :
Please Enter Input :  2
No Problem Have a nice day
```

```
mysql> show tables;
+--------------------+
| Tables_in_comprec  |
+--------------------+
| firstaid           |
| furniture          |
| groceries          |
| stationary         |
+--------------------+
4 rows in set (0.00 sec)
```

```
mysql> select * from firstaid;
+------------+------------------+----------+
| FirstAidNo | FirstAidItem     | Quantity |
+------------+------------------+----------+
|          1 | Plaster          |       14 |
|          2 | Gauze            |       15 |
|          3 | Bandages         |       22 |
|          4 | Safty pins       |       25 |
|          5 | Gloves           |       15 |
|          6 | Tweezers         |       16 |
|          7 | Scissors         |       15 |
|          8 | Thermometer      |       18 |
|          9 | Skin Rash Cream  |       14 |
|         10 | Painkillers      |       16 |
|         11 | Cough medicine   |       12 |
|         13 | Eye wash         |       10 |
|         14 | Sticky tape      |       11 |
|         15 | Asprin           |       13 |
|         16 | Antacid          |       17 |
|         17 | Nasal Spray      |       15 |
|         18 | Insect Repellent |       18 |
|         19 | Sunscreen        |       15 |
|         20 | Mask             |       20 |
+------------+------------------+----------+
19 rows in set (0.01 sec)
```

```
mysql> select * from furniture;
+-------------+--------------------+-----------+
| FurnitureNo | FurnitureName      | Quantity  |
+-------------+--------------------+-----------+
|           1 | Armchair           |        20 |
|           2 | stool              |        25 |
|           3 | Bean Bag Chair     |         8 |
|           4 | Bed                |        15 |
|           5 | Bunk bed           |         6 |
|           6 | Bookshelf          |        10 |
|           7 | Carpet             |         6 |
|           8 | Cupboard           |         8 |
|           9 | Couch              |        10 |
|          10 | Cushion            |        12 |
|          12 | Curtain            |        13 |
|          13 | Desk               |        16 |
|          14 | Desk Chair         |        20 |
|          15 | Grandfather Clock  |         3 |
|          16 | Garden Bench       |         5 |
|          17 | Table              |        14 |
|          18 | Hat Stand          |         8 |
|          19 | Shelf              |        15 |
|          20 | Rocking chair      |         9 |
+-------------+--------------------+-----------+
19 rows in set (0.00 sec)
```

```
mysql> select * from groceries;
+-------------+-------------------+-----------+
| GroceriesNo | GrocerName        | Quantity  |
+-------------+-------------------+-----------+
|           1 | Apple             |        20 |
|           2 | Watermelons       |         7 |
|           3 | Soda              |        13 |
|           4 | Milk              |        16 |
|           5 | Bread             |        12 |
|           6 | Cheese            |         8 |
|           8 | Cereals           |        12 |
|           9 | Tomato sauce      |        15 |
|          10 | Mustard           |        10 |
|          11 | Salsa             |         5 |
|          12 | Hot pepper sauce  |         8 |
|          13 | Eggs              |        24 |
|          14 | Tofu              |        11 |
|          15 | Butter            |        18 |
|          16 | Chocolate         |        20 |
|          17 | Banana            |        22 |
|          18 | Mango             |        20 |
|          19 | Water             |        25 |
|          20 | Potato            |        18 |
+-------------+-------------------+-----------+
19 rows in set (0.00 sec)
```

```
mysql> select * from stationary;
+--------------+-------------------+----------+
| StationaryNo | StationaryName    | Quantity |
+--------------+-------------------+----------+
|            1 | Pens              |       22 |
|            2 | Highlighter       |       20 |
|            3 | Permanent Marker  |       18 |
|            4 | Eraser            |       19 |
|            5 | Pencil            |       25 |
|            6 | Pencil Sharpener  |       20 |
|            7 | Ruler             |       20 |
|            8 | Plain Paper       |       25 |
|            9 | Glue              |       19 |
|           10 | Paper Clips       |       20 |
|           11 | Sticky tape       |       15 |
|           12 | Calculator        |       10 |
|           13 | Utitity Knife     |       13 |
|           14 | Rubber Bands      |       20 |
|           15 | Stapeler          |       16 |
|           16 | Envelope          |       19 |
|           17 | WhiteBoard        |       10 |
|           18 | Geometry Box      |       13 |
|           19 | Scarpbook         |       14 |
|           20 | Wall hooks        |       21 |
+--------------+-------------------+----------+
20 rows in set (0.00 sec)
```

```
INPUT THE RECENTLY SOLD ITEMS~ apple
1 0 0 0
INPUT THE RECENTLY SOLD ITEMS~
```

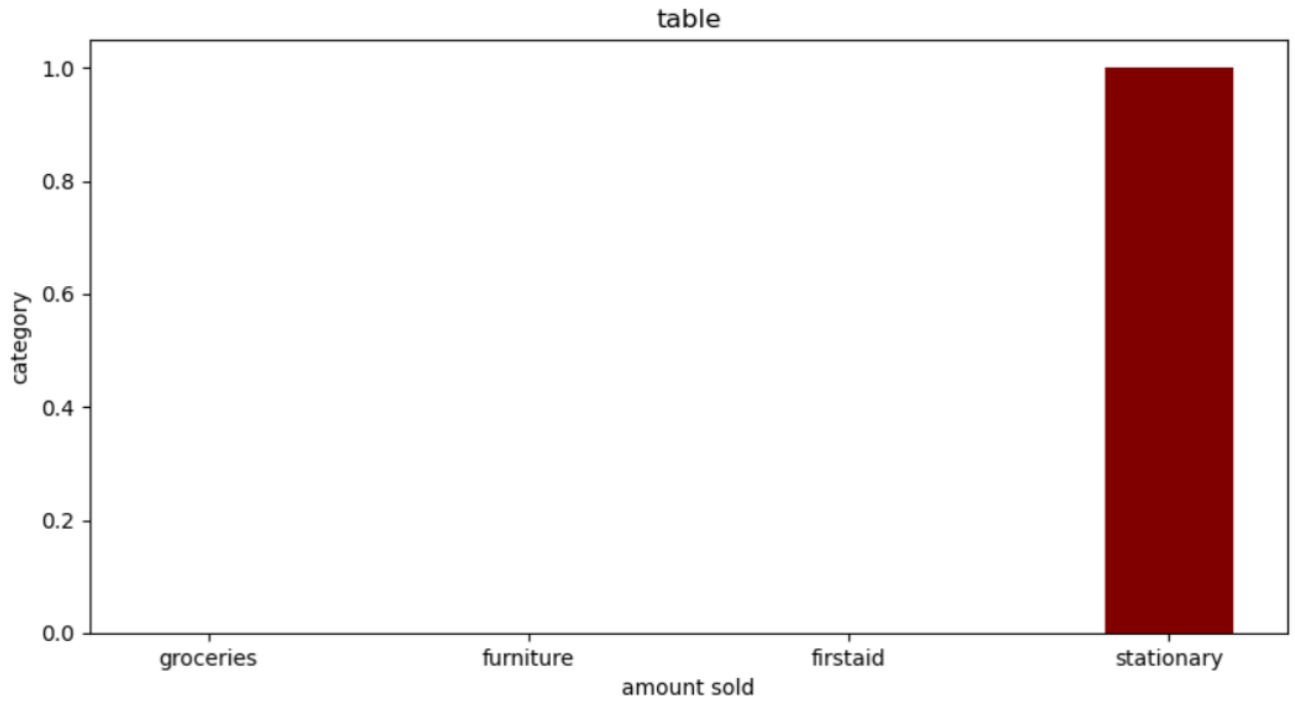
table
1.0
0.8
0.6
0.4
0.2
0.0
category
groceries
furniture
firstaid
stationary
amount sold

EXPLANATION OF OUTPUT

Figure 1- The opening message.

This message greets the user and explains the aim of this program and the general instructions of how to use this program. Using these instructions, the user will be able to navigate the entire program.

Figure 2- Recommendation of a category.

The user is guided to choose any category of his preference to provide the customer with offers.

Figure 3- To accept or decline the offer.

The user is prompted if he wishes to accept the suggestion of the program or decline the suggestion.

Figure 4- Inventory of market.

This snippet displays the user's current inventory which is used to recommend the product from the respective category. Upon the use being prompted to choose a category.

Figure 5 -Alteration in current inventory.

The user is prompted to make changes to the current inventory by selecting 1 or 2 to add or delete a product in its respective category.

Figure 6-Recommendation of a product.

The user is guided to choose any product of his preference to provide the customer with offers.

Figure 7-Database of the categories.

The snippet displays the different categories (tables, such as first aid furniture groceries stationaries) in an orderly manner.

Figure 8-Table named as First-aid.

The snippet consists of all the necessary items which come under the category of first aid along with the quantity of each product.

Figure 9-Table named as Furniture.

The snippet consists of all the necessary items which come under the category of furniture along with the quantity of each product.

Figure 10-Table named as Groceries.

The snippet consists of all the necessary items which come under the category of groceries along with the quantity of each product.

Figure 11-Table named as Stationary.

The snippet consists of all the necessary items which come under the category of stationary along with the quantity of each product.

Figure 12- Tally of sold items.

The snippet showcases the tally of the sold items segregated in their respective categories.

Figure 13-Data visualization.

Visual representation of measured data inputted by the user when prompted.

LIMITATIONS

- The user cannot continue from a desired point of time as the code resets and doesn't save the data.
- The program is case sensitive
- The user cannot share his data with other clients to customers
- There is no security for the program

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