**THE ORBIS SCHOOL**

**KESHAVNAGAR, PUNE**



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CLASS: 12 – RIGEL

CBSE ROLL NO:

SUBJECT: INFORMATICS PRACTICES

ACADEMIC YEAR: 2020-21

TEACHER IN CHARGE: Mrs. Veronica Dorairaj

CERTIFICATE

This is to certify that Nikita Nair/ Sanjana Mitra student of class 12-Rigel has successfully completed the Informatics Practices project under the guidance of Mrs. Veronica Dorairaj during the academic session 2020-21 as per the guidelines issued by CBSE.

**Subject Teacher: Mrs. Veronica Dorairaj** **Principal: Mrs. Nalini Samuel**

**Signature of External Examiner**

ACKNOWLEDGEMENT

I would like to express my special thanks of gratitude to my teacher Mrs. Veronica Dorairaj who guided and helped me to complete the comprehensive and specific project in Informatics Practices successfully.

I would also like to thank my school, parents and friends who helped me procure adequate resources to finalize this project in the limited period of time.

Nikita Nair/ Sanjana Mitra

12-Rigel

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Creation of Database and Table in MySQL

create database inventory

use inventory

-- Table structure for table `vehicledata`

CREATE TABLE `vehicledata`

(

`id` int(10) NOT NULL,

`category` varchar(20),

`make` varchar(20),

`colour` varchar(20),

`mileage` int(5),

`year` int(4)

) ;

ALTER TABLE `vehicledata`

ADD PRIMARY KEY (`ID`);

INSERT INTO `vehicledata` (`id`, `category`, `make`,`colour`,`mileage`,`year`) VALUES

(1, 'sedan','chevrolet','yellow','30', '2019'),

(2, 'truck','ford','red', '40','2018'),

(3, 'suv','toyota','blue', '50','2019'),

(4, 'minivan','chryster','red','20', '2017')

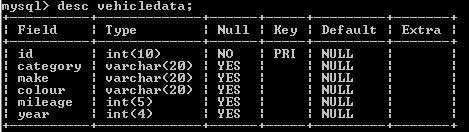
(5, 'sedan','chevrolet','blue','30', '2016')

(6, 'suv', 'honda', 'silver', 54, 2020);

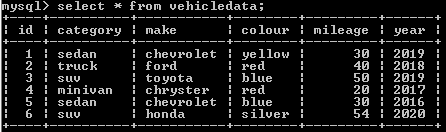
commit;

select \* from `vehicledata`;

**Describing the table**



**Displaying the table**



**PROGRAM IN IDLE**

#Vehicle Inventory System using Python and MySQL.

#This project is for Car Dealership that can add, remove and edit vehicles.

import pymysql

import csv

import pandas as pd

import matplotlib.pyplot as plt

import numpy as np

from pandas import DataFrame

con = pymysql.connect("localhost","root","root","inventory")

cur=con.cursor()

def main():

connection()

def connection():

username="auto"

password="mobile"

print("Username : ")

answer1=input()

print("Password : ")

answer2=input()

if answer1==username and answer2==password:

print("WELCOME TO VEHICLE INVETORY SYSTEM")

inventory()

else:

print("Incorrect Username or Password, Please try again:")

exit

def option():

pass

ch=input("Do you wish to continue with the menu, Press y for yes or n for no :")

if(ch=='y' or ch=='Y'):

inventory()

else:

exit

print("Thank You for being our valuable customer:")

def inventory():

print("\*INVENTORY MENU\*")

print()

userinput = input("""

#1 Add Vehicle to Inventory

#2 Delete Vehicle from Inventory

#3 View Current Inventory

#4 Update Vehicle in Inventory

#5 Export Current Inventory

#6 Generate Bargraph

#7 Quit

Please choose from one of the above options: """)

if userinput == "1":

addvehicles()

elif userinput == "2":

deleteinventory()

elif userinput == "3":

viewinventory()

elif userinput=="4":

updateinventory()

elif userinput=="5":

exportinventory()

elif userinput=="6":

bargraph()

elif userinput=="7":

print("Goodbye:")

exit

else:

print("This is an invalid input")

print("Please try again")

inventory()

def addvehicles():

id=int(input("Enter vehicle id :"))

category=input("Enter vehicle category :")

make=input("Enter vehicle make :")

colour=input("Enter vehicle colour :")

mileage=int(input("Enter vehicle mileage :"))

year=input("Enter vehicle year :")

values=(id,category,make,colour,mileage,year)

cur=con.cursor()

st="insert into vehicledata values(%s,%s,%s,%s,%s,%s)"

result=cur.execute(st,values)

con.commit()

if(result==True):

print("This vehicle has been added, Thank you")

option()

def viewinventory():

id=int(input("Enter vehicle id to view the data :"))

st="select \* from vehicledata where id in ( (%s),(%s))"

cur=con.cursor()

cur.execute(st,(id,id))

data=cur.fetchall()

print(data)

option()

def updateinventory():

print(" Update can be done on the following fields 1.Make, 2.Colour No, 3.Mileage")

print("Enter option 1-3 for update :")

ch=int(input())

if(ch==1):

id=int(input("Enter vehicle id to update the data :"))

ch1=str(input("Enter the new make :"))

values=(ch1,id)

st="update vehicledata set make=%s where id=%s"

cur=con.cursor()

data=cur.execute(st,values)

con.commit()

if(data==True):

print("Vehicle Make updated successfully ")

else:

print("Error try again :")

print(data)

elif(ch==2):

id=int(input("Enter vehicle id to update the data :"))

ch1=input("Enter the new colour :")

values=(ch1,id)

st="update vehicledata set colour=%s where id=%s"

cur=con.cursor()

data=cur.execute(st,values)

con.commit()

if(data==True):

print("Vehicle colour updated successfully ")

else:

print("Error try again :")

elif(ch==3):

id=int(input("Enter Vehicle id to update the data :"))

ch1=input("Enter the new mileage :")

values=(ch1,id)

st="update vehicledata set mileage=%s where id=%s"

cur=con.cursor()

data=cur.execute(st,values)

con.commit()

if(data==True):

print("Vehicle mileage updated successfully ")

else:

print("Error try again :")

option()

def deleteinventory():

id=int(input("Enter the id to delete the data :"))

st="delete from vehicledata where id in ( (%s),(%s))"

data=cur.execute(st,(id,id))

st1="select \* from vehicledata where id=%s"

cur.execute(st1,id)

con.commit()

if(data==True):

print('This vehicle has been removed')

print(cur.fetchone())

else:

print("Error try again :")

option()

def exportinventory():

cur.execute("select \* from vehicledata")

data=cur.fetchall()

with open('C:\\Users\\User\\Desktop\\vehicle.csv', 'w', newline='') as f\_handle:

writer = csv.writer(f\_handle)

# Add the header/column names

header = ['id','category','make', 'color', 'mileage','year']

writer.writerow(header)

# Iterate over `data` and write to the csv file

for row in data:

writer.writerow(row)

print ("The data has been successfully exported")

option()

def bargraph():

data=pd.read\_csv("C:\\Users\\User\\Desktop\\vehicle.csv")

data.head()

print(data)

df=pd.DataFrame(data,columns=['id','category','make','color','mileage','year'])

plt.xlabel('Make of Car')

plt.ylabel('Mileage of Car')

plt.title('Bar Chart to Show Mileage of Cars')

x=data.make

y=data.mileage

plt.bar(x,y)

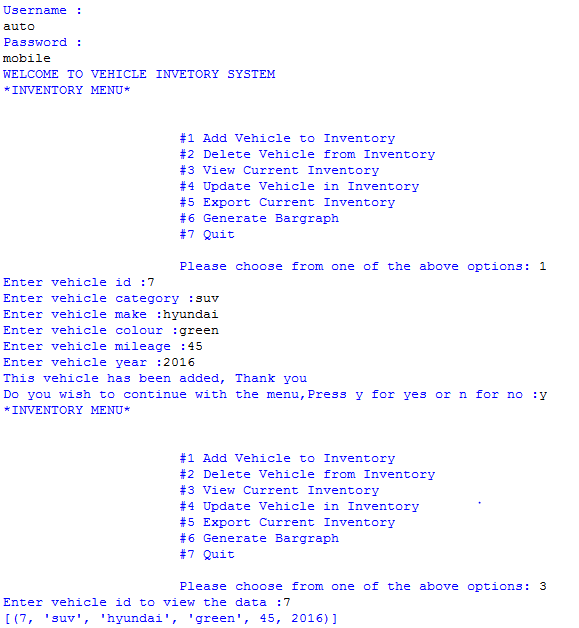
plt.show()

option()

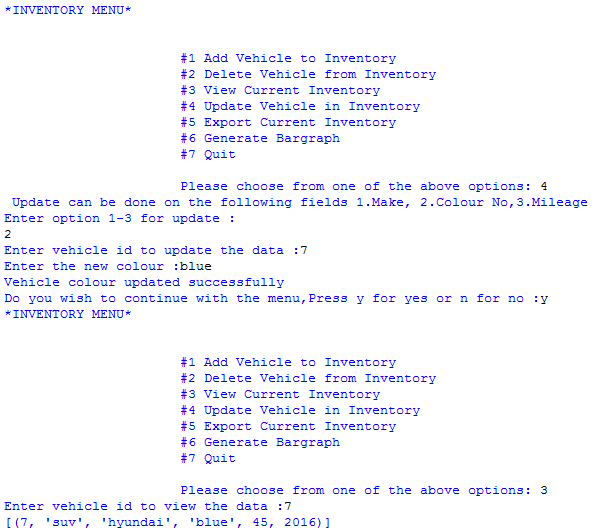
main()

OUTPUT OF THE PROGRAM

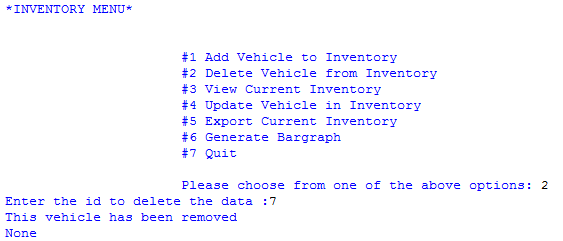
* **Starting the Program, Adding and Viewing the Data**

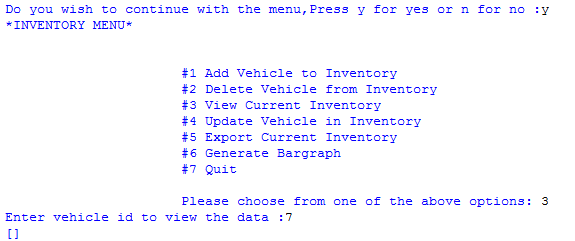


* **Updating and viewing the data**

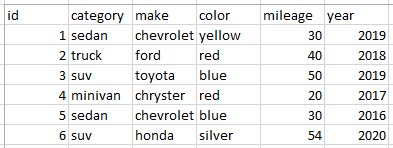


* **Deleting and viewing Data**



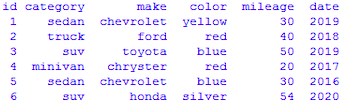


* **Viewing the file after exporting it through Microsoft Excel**

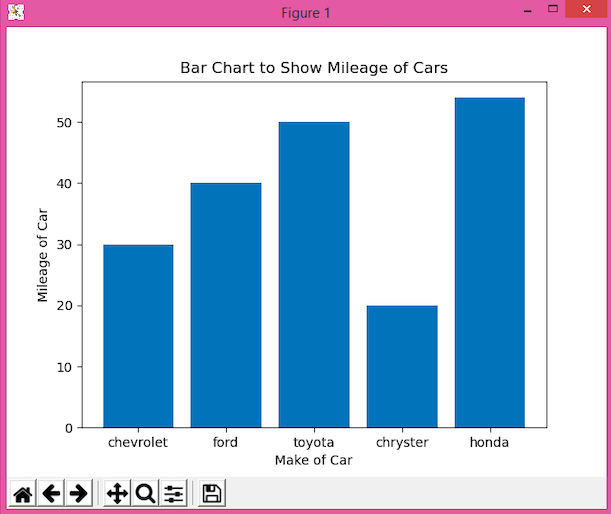


* **Viewing the Graph**

**Data**

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**Graph**

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