**#Create CSV file for product selling for 6 Months ( Prod\_No | Prod\_Name | Jan | Feb | Mar | Apr | May | Jun) for 5 products.**

**#Perform following operations.**

**#1. Add 12 Records. Take input from user.**

**import csv**

**import pandas as pd**

**header = ["Prod\_No", "Prod\_Name", "Jan", "Feb", "Mar", "Apr", "May", "Jun"]**

**data=[[1,'Lipstick',10,20,20,35,25,30],[2,'Kajal',20,4,5,3,20,12],[3,'EyeLiner',10,10,20,11,12,8],[4,'NailPolish',10,23,20,35,20,3],[5,'Shampoo',10,22,20,35,22,32]]**

**with open('c:\sqlite3\csv\Product.csv','w',newline='') as f:**

**w=csv.writer(f)**

**w.writerow(header)**

**w.writerows(data)**

**for i in range(12):**

**no=int(input("Enter Product No. :"))**

**name=input("Enter Product Name :")**

**jan=int(input("Enter Jan sell :"))**

**feb=int(input("Enter Feb sell :"))**

**mar=int(input("Enter Mar sell :"))**

**apr=int(input("Enter Apr sell :"))**

**may=int(input("Enter May sell :"))**

**june=int(input("Enter June sell :"))**

**sub\_lis=[no,name,jan,feb,mar,apr,may,june]**

**w.writerow(sub\_lis)**

**with open('c:\sqlite3\csv\Product.csv','r',errors='ignore') as f:**

**w=csv.reader(f)**

**for i in w:**

**print(i)**

**#2. Create dataframe.**

**csv\_file='c:\sqlite3\csv\Product.csv'**

**df=pd.read\_csv(csv\_file)**

**df**

**#3. Change Column Name Product No, Product Name, January, February, March, April, May, June.**

**df.columns=["Product No","Product Name","January","February","March","April","May","June"]**

**df**

**#4. Add column "Total Sell" to count total of all month and "Average Sell"**

**df["Total Sell"]=df.iloc[:,2:].sum(axis=1)**

**df["Average Sell"]=df.iloc[:,2:8].mean(axis=1)**

**df**

**#5. Add 2 row at the end.**

**df.loc[17]=(18,"Toothpaste",1000,2000,300,400,500,600,2100,350.000000)**

**df.loc[18]=(19,"Powder",100,200,3000,400,5000,600,2100,350.000000)**

**df**

**#6. Add 2 row after 3rd row.**

**new\_rows = pd.DataFrame([[20, "LipBalm", 8000, 7000, 6000, 50, 40, 30,330,305.000000], [21, "Conditioner", 20000, 3000, 4000, 5000, 6000, 70,270,211.666667]], columns=df.columns)**

**df = pd.concat([df.iloc[:3], new\_rows, df.iloc[3:]]).reset\_index(drop=True)**

**df**

**#7. Print first 5 row.**

**df.head()**

**df**

**#8. Print Last 5 row.**

**df.tail()**

**df**

**#9. Print row 6 to 10.**

**df.iloc[5:10,:]**

**df**

**#10. Print only product name.**

**df.iloc[:,1]**

**df["Product Name"]**

**df**

**#11. Print sell of January month with product id and product name.**

**df[["Product No","Product Name","January"]]**

**df**

**#12. Print only those product id , product name where january sell is > 5000 and February sell is >8000**

**df[(df["January"] > 5000) & (df["February"] > 8000)][["Product No", "Product Name"]]**

**df**

**#13. Print record in sorting order of Product name.**

**df.sort\_values(by="Product Name")**

**df**

**#14. Display only odd index number column record.**

**df.iloc[:,1::2]**

**df**

**#15. Display alternate row.**

**df.iloc[::2]**

**df**