

PROJECT FILE

INFORMATICS PRACTICES

SESSION: 2020-2021

PREPARED BY-

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CLASS & SECTION: XII – C

MEDICAL STORE

MANAGEMENT SYSTEM

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INTRODUCTION

This software project is developed to automate the functionalities of a Medical Store. This project is designed and coded in Python and information management is handled by CSV files. This software mainly focuses on basic operations in a medical store such as displaying stock, sales or employee records, adding new items/employee, deleting records, printing data visualized graphs and also maintaining the data.

Medical Store Management System is a python application written on 64-bit Windows 10 operating system, designed to maintain and organize the store records. The software is easy to use for both beginners as well as advanced users.

It contains addition, modification, deletion and generating graphs as per requirement.

SOFTWARE REQUIREMENT

+ Windows OS

+ Python

HARDWARE REQUIREMENT

+ **OPERATING SYSTEM:** WINDOWS 7 AND ABOVE

+ **PROCESSOR:** PENTIUM (ANY) OR AMD ATHALON(3800+- 4200+ DUAL CORE)

+ **MOTHERBOARD:** 1.845 OR 915,995 FOR PENTIUM OR MSI K9MM-V VIA
K8M800+8237R PLUS CHIPSET FOR AMD ATHALON

+ **RAM:** 4GB+

+ **HARD DISK:** 500GB

+ **MONITOR:** 14.1 or 15 -17 inch

+ **KEYBOARD AND MOUSE:** YES

+ **PRINTER:** if print is required – Hard copy

CSV TABLES

Table 1: *username and password of the medical store management system*

The screenshot displays the Microsoft Excel application window. The title bar reads "users - Microsoft Excel". The ribbon is set to the "Home" tab, showing options for Clipboard, Font, Paragraph, Styles, Cells, and Editing. The spreadsheet area has columns labeled A through O and rows numbered 1 through 18. The data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	username	password													
2	medical	python													
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															
13															
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15															
16															
17															
18															

The status bar at the bottom indicates the worksheet is "Ready". The Windows taskbar shows the search bar, task view button, and several open applications including File Explorer, Google Chrome, and a terminal window. The system clock shows 2:00 AM on 04-Feb-21.



Table 2: *stock available in the medical store*

stock - Microsoft Excel




HomeInsertPage LayoutFormulasDataReviewView


CutCopyPasteFormat PainterClipboard

Calibri11A⁺A⁻

BIU

Font








Wrap Text

Alignment




General

\$ % > < 00 00



Number





Conditional FormattingFormat as TableCell Styles




InsertDeleteFormat



Σ AutoSumFill



Sort & FilterFind & Select



Clear

Editing


A1fxmcode

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	mcode	mname	dateofexp	quan	price									
2	101	Dolo 500mg	12-12-24	30	150									
3	102	Ciplox 650mg	10-10-25	40	120									
4	103	Sanitizer 500ml	10-10-26	20	220									
5	104	Lifebuoy Soap	23-12-30	30	60									
6	105	Surgical Mask	10-12-29	50	20									
7	106	Dettol 200ml	13-10-30	40	90									
8	107	Vicks 50mg	23-11-29	35	50									
9	108	Iodex 50mg	12-10-21	20	55									
10														
11														
12														
13														
14														
15														
16														
17														
18														

stock

Ready

Type here to search



2:00 AM 04-Feb-21

Table 3: staff details of the medical store

staff - Microsoft Excel

Home Insert Page Layout Formulas Data Review View

Clipboard Font Alignment Number Conditional Formatting Format as Table Cell Styles Insert Delete Format AutoSum Fill Sort & Find & Filter Select Editing

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	sid	name	age	profile	mobile	salary								
2	201	Mahinder	38	Sales Person	887997122	28000								
3	202	Arif	29	Field work	856112897	32000								
4	203	Naman	36	Sales Person	971213008	27000								
5	204	Ammar	42	Cashier	879060012	35000								
6	205	Narendar	39	Field Work	890789570	30000								
7	206	Shikha Suri	45	Manager	758964853	38000								
8														
9														
10														
11														
12														
13														
14														
15														
16														
17														
18														

Ready staff 140%

Type here to search

2:00 AM
04-Feb-21

Table 4: *sales record of the medical store*[illegible]

PROGRAM CODE

```
import pandas as pd
import matplotlib.pyplot as plt
import sys
```

```
def stockrec():
    print("Reading Stock Records")
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\stock.csv")
    print(df)
```

```
def newmed():
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\stock.csv",index_col=0)
    print(df)
    a=int(input("Enter medicine code: "))
    b=(input("Enter medicine name: "))
    c=(input("Enter Date of Expiry: "))
    d=int(input("Enter Quantity: "))
    e=int(input("Enter Price: "))
    df.loc[a]=[b,c,d,e]
    df.to_csv("C:\\Users\\welch\\Desktop\\stock.csv")
    print("Data successfully added")
    print(df)
```

```
def removemed():
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\stock.csv",index_col='mcode')
    mcode=int(input("Enter mcode: "))
    df.drop(mcode,axis=0,inplace=True)
    print("Record of Medicine Temporarily deleted")
    print(df)
```

```
def updatemed():  
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\stock.csv",index_col='mcode')  
    print(df)  
    a=int(input("Enter Medicine Code needs to be updated: "))  
    b=(input("Enter Medicine Name: "))  
    c=(input("Enter Date of Expiry: "))  
    d=int(input("Enter Quantity: "))  
    e=int(input("Enter Price: "))  
    df.loc[a]=[b,c,d,e]  
    df.to_csv("C:\\Users\\welch\\Desktop\\stock.csv")  
    print("Data successfully updated:")  
    print(df)
```

```
def stockplot():  
    print("Printing Stock Report")  
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\stock.csv")  
    x=df['mname']  
    y=df['quan']  
    plt.title("Medicine Names and Quantity")  
    plt.xlabel("Medicine")  
    plt.ylabel("Quantity")  
    plt.xticks(rotation=15)  
    plt.plot(x,y,marker='X',ls="dashed",linewidth=4,color="red")  
    plt.show()
```

```

def staffrec():
    print("Reading Employee Records")
    print()
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\staff.csv")
    print(df)

def newstaff():
    print()
    print("Old Employees Record in File Staff:")
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\staff.csv",index_col=0)
    print(df)
    a=int(input("Enter Employee ID: "))
    b=(input("Enter Employee Name: "))
    c=(input("Enter Age: "))
    d=(input("Enter Employee profile: "))
    e=int(input("Enter Mobile No. : "))
    f=int(input("Enter Salary: "))
    df.loc[a]=[b,c,d,e,f]
    df.to_csv("C:\\Users\\welch\\Desktop\\staff.csv")
    print("New Employee Added")
    print(df)

def salesrec():
    print("Reading Sales Records")
    print()
    print()
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\sales.csv")
    print(df)

```

```
def newsales():  
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\sales.csv",index_col=0)  
    print(df)  
    a=int(input("Enter Customer's mobile no. : "))  
    b=(input("Enter medicine code: "))  
    c=(input("Enter medicine name: "))  
    d=int(input("Enter Quantity: "))  
    e=int(input("Enter Price: "))  
    df.loc[a]=[b,c,d,e]  
    df.to_csv("C:\\Users\\welch\\Desktop\\sales.csv")  
    print("Data succesfully added")  
    print(df)
```

```
def salesplot():  
    print("Printing Sales Report")  
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\sales.csv")  
    x=df['mname']  
    y=df['quan']  
    plt.title('Sold Medicines and their Quantity')  
    plt.xlabel('Medicine')  
    plt.ylabel('Quantity')  
    plt.xticks(rotation=15)  
    plt.bar(x,y,color='blue')  
    plt.show()
```

```
def login():  
    uname=input("Enter Username: ")  
    pwd=input("Enter Password: ")  
    df=pd.read_csv("C:\\Users\\welch\\Desktop\\users.csv")  
    df=df.loc[df["username"]==uname]  
    if df.empty:  
        print("Invalid Username given")  
        return False  
    else:  
        df=df.loc[df["password"]==pwd]  
        if df.empty:  
            print("Invalid Password")  
            return False  
        else:  
            print("Username and Password matched successfully")  
            return True
```

```
def menu():  
    print()  
    print("=====")  
    print("                MEDICAL STORE MANAGEMENT SYSTEM                ")  
    print("=====")  
    print("                (1)DISPLAY STOCK RECORD                ")  
    print("                (2)ADD NEW ITEM                        ")  
    print("                (3)DELETE ITEM                          ")  
    print("                (4)UPDATE ITEM                          ")  
    print("                (5)PRINT STOCK REPORT                   ")  
    print("                (6)DISPLAY STAFF DETAILS                ")  
    print("                (7)ADD NEW STAFF DETAILS                ")  
    print("                (8)DISPLAY SALES RECORD                 ")  
    print("                (9)ADD NEW SALES RECORD                 ")  
    print("                (10)PRINT SALES REPORT                   ")  
    print("                (00)EXIT                                 ")  
    print()  
    choice=int(input("Enter your choice: "))  
    return choice
```

```
if login():
    while True:
        opt=menu()
        if opt==1:
            stockrec()
        elif opt==2:
            newmed()
        elif opt==3:
            removemed()
        elif opt==4:
            updatemed()
        elif opt==5:
            stockplot()
        elif opt==6:
            staffrec()
        elif opt==7:
            newstaff()
        elif opt==8:
            salesrec()
        elif opt==9:
            newsales()
        elif opt==10:
            salesplot()
        elif opt==00:
            break
    else:
        print("Invalid Option Selected")
```


OUTPUT

Press F5 for output: *username* and *password* entered correctly

```
C:\WINDOWS\spy.exe
Enter Username: medical
Enter Password: python
Username and Password matched successfully

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice:
```

Press 1: Reading the stock records from *mstock* CSV file

```
C:\WINDOWS\spy.exe

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 1
Reading Stock Records
mcode      mname      dateofexp  quan  price
0   101      Dolo 500mg 12-12-2024 30   150
1   102      Ciplox 650mg 10-10-2025 40   120
2   103      Sanitizer 500ml 10-10-2026 20   220
3   104      Lifebuoy Soap 23-12-1930 30   60
4   105      Surgical Mask 10-12-2029 50   20
5   106      Dettol 200ml 13-10-2030 40   90
6   107      Vicks 50mg 23-11-2029 35   50

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
```

Press 2: Adding new item to the *mstock* CSV file

```
Select C:\WINDOWS\py.exe
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 2

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50

Enter medicine code: 108
Enter medicine name: Iodex 50mg
Enter Date of Expiry: 12-10-2021
Enter Quantity: 20
Enter Price: 55
Data successfully added

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50
108      Iodex 50mg  12-10-2021  20     55
```

Press 3: Updating the previously entered records in *mstock* CSV file

```
Select C:\WINDOWS\py.exe
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 3

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50
108      Iodex 50mg  12-10-2021  20     55

Enter mcode: 108
Record of Medicine Temporarily deleted

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50
```

Press 4: Updating the previously entered records in *mstock* CSV file

```
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

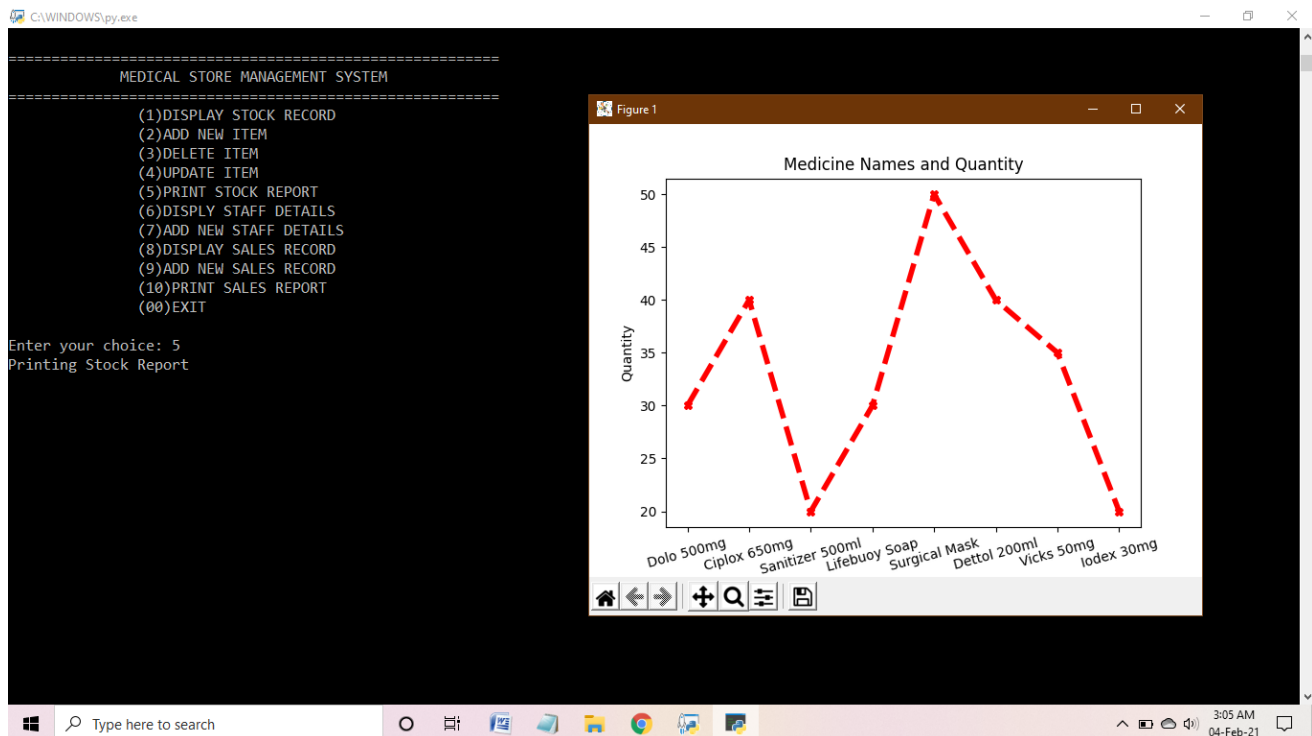
Enter your choice: 4

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50
108      Iodex 50mg  12-10-2021  20     55

Enter Medicine Code needs to be updated: 108
Enter Medicine Name: Iodex 30mg
Enter Date of Expiry: 30-10-2021
Enter Quantity: 20
Enter Price: 55
Data successfully updated:

mcode      mname      dateofexp  quan  price
101      Dolo 500mg  12-12-2024  30    150
102      Ciplox 650mg  10-10-2025  40    120
103      Sanitizer 500ml  10-10-2026  20    220
104      Lifebuoy Soap  23-12-1930  30     60
105      Surgical Mask  10-12-2029  50     20
106      Dettol 200ml  13-10-2030  40     90
107      Vicks 50mg  23-11-2029  35     50
108      Iodex 30mg  30-10-2021  20     55
```

Press 5: Showing the line plot of stock records from *mstock* CSV file



Press 6: Reading the employee records from *mstaff* CSV file

```
C:\WINDOWS\py.exe

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 6
Reading Employee Records

  sid   name  age  profile  mobile  salary
0  201 Mahinder  38  Sales Person  887997122  28000
1  202  Arif  29   Field work  856112897  32000
2  203  Naman  36  Sales Person  971213008  27000
3  204  Ammar  42   Cashier  879060012  35000
4  205  Narendar  39   Field Work  890789570  30000

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
```

Press 7: Adding a new employee record to the *mstaff* CSV file

```
C:\WINDOWS\py.exe

=====
MEDICAL STORE MANAGEMENT SYSTEM
=====

(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 7

Old Employees Record in File Staff:

  sid   name  age  profile  mobile  salary
201 Mahinder  38  Sales Person  887997122  28000
202  Arif  29   Field work  856112897  32000
203  Naman  36  Sales Person  971213008  27000
204  Ammar  42   Cashier  879060012  35000
205  Narendar  39   Field Work  890789570  30000

Enter Employee ID: 206
Enter Employee Name: Shikha Suri
Enter Age: 45
Enter Employee profile: Manager
Enter Mobile No. : 758964583
Enter Salary: 38000
New Employee Added

  sid   name  age  profile  mobile  salary
201 Mahinder  38  Sales Person  887997122  28000
202  Arif  29   Field work  856112897  32000
203  Naman  36  Sales Person  971213008  27000
204  Ammar  42   Cashier  879060012  35000
205  Narendar  39   Field Work  890789570  30000
206 Shikha Suri  45   Manager  758964583  38000
```

Press 8: Reading the sales records from *msales* CSV file

```
Ca:\WINDOWS\spy.exe
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 8
Reading Sales Records

mobile mcode mname quan price
0 981911008 101 Dolo 500mg 13 150
1 989166608 102 Ciplox 650mg 20 120
2 768596423 103 Sanitizer 500ml 25 220
3 989110081 105 Surgical Mask 45 20
4 989166608 106 Dettol 200ml 50 90
5 981854496 107 Vicks 50mg 30 25
6 858788472 108 Ciplox TZ 35 130

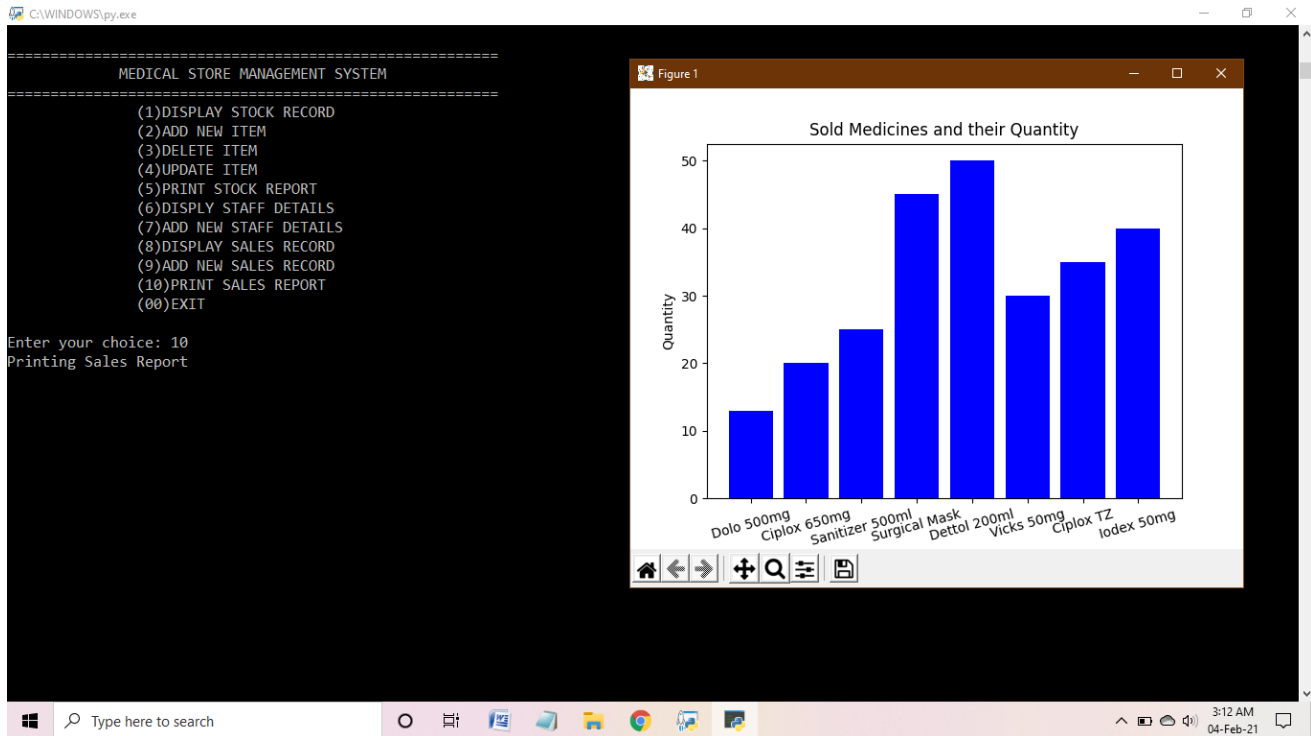
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
```

Press 9: Adding a new sales record to the *msales* CSV file

```
Ca:\WINDOWS\spy.exe
=====
MEDICAL STORE MANAGEMENT SYSTEM
=====
(1)DISPLAY STOCK RECORD
(2)ADD NEW ITEM
(3)DELETE ITEM
(4)UPDATE ITEM
(5)PRINT STOCK REPORT
(6)DISPLY STAFF DETAILS
(7)ADD NEW STAFF DETAILS
(8)DISPLAY SALES RECORD
(9)ADD NEW SALES RECORD
(10)PRINT SALES REPORT
(00)EXIT

Enter your choice: 9
mobile mcode mname quan price
981911008 101 Dolo 500mg 13 150
989166608 102 Ciplox 650mg 20 120
768596423 103 Sanitizer 500ml 25 220
989110081 105 Surgical Mask 45 20
989166608 106 Dettol 200ml 50 90
981854496 107 Vicks 50mg 30 25
858788472 108 Ciplox TZ 35 130
Enter Customer's mobile no. : 965843254
Enter medicine code: 110
Enter medicine name: Iodex 50mg
Enter Quantity: 40
Enter Price: 55
Data succesfully added
mobile mcode mname quan price
981911008 101 Dolo 500mg 13 150
989166608 102 Ciplox 650mg 20 120
768596423 103 Sanitizer 500ml 25 220
989110081 105 Surgical Mask 45 20
989166608 106 Dettol 200ml 50 90
981854496 107 Vicks 50mg 30 25
858788472 108 Ciplox TZ 35 130
965843254 110 Iodex 50mg 40 55
```

Press 10: Showing the bar graph of sales records from *msale* CSV file



CONCLUSION

This project has a wider scope in future and can be helpful to many. Since this project is made in python, it reduces manual work and with the help of CSV files, the system was able to store and update the database with more ease.

This project also clears the functions of various python commands. It also shows the application of python's different libraries.

Thus, the project "*Medical Store Management System*" can also be altered in accordance with the future requirements of the organization.

BIBLIOGRAPHY



Informatics Practices Textbook (Sumita Arora)



www.youtube.com