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ABSTRACT

This python project presents a computer science-based hospital management system that seeks to improve the efficiency of a hospital's operations. The system is composed of three main components: patient registration, medical records and self-evaluation. The registration module captures patient demographic information, medical history. The medical records module stores patient medical information, and the billing module records patient financial information. The system is designed to provide secure access to the hospital's records, increase accuracy of information, and reduce paperwork. It also allows for better data analysis and decision-making. Additionally, the system allows for integration with other hospital management systems, such as appointments and pharmacy, to provide a comprehensive view of the patient's data. This system is expected to improve the quality of patient care and satisfaction, as well as reduce paperwork and administrative costs.

INTRODUCTION TO PYTHON

Python is a high level, general-purpose, interpreted dynamic programming language which is increasingly becoming popular in the world of coding in recent times. The uniqueness of this programming language lies in the fact that its design philosophy gives importance to code readability, and the syntax is designed in such a way that concepts can be expressed in a fewer number of lines than in the case of other programming languages like C++ or Java. Python is capable of supporting multiple programming paradigms like "object oriented programming", "imperative programming" and "functional programming". Python also has automatic memory management along with a vast and comprehensive standard library.

History

Python was conceptualized by a man named Guido van Rossum in the late 1980s, and the implementation of this programming began in December 1989 at Centrum Wiskunde & Informatica in the Netherlands.

Versions

Python 2.0 was released on 16th October, 2000 and showcased many innovative features that weren't seen before, including a cycle-detecting garbage collector and a support for Unicode. The development process there hence, became far more transparent and community supported.

Python 3.0, which was a major backwards-incompatible release, was released on 3rd December, 2008 after an extended period of testing.

Syntax and Semantics

Python is a programming language which was meant to be a highly readable and user friendly with a clean, uncluttered visual layout. While other languages use punctuationand have a large number of syntactic expressions, Python uses primarily English keywords and has fewer syntactic expressions.

Indentation:

Whitespace indentation is used in Python as opposed to keywords or curly brackets asseen in other languages.

Statements:

Some of the key statements used in Python include, 'def', 'if', 'for', 'while', 'class','import', 'print', etc.

Methods:

Methods are functions which are attached to an object's class. *instance.method(argument)* is for normal methods and functions. Python methods have an explicit *self* parameter to access 'instance data', whereas, implicit *self* or *this* are used in other OOP languages.

Applications

Python excels at integration tasks, and therefore, it is an efficient tool for gluing things together. For example, 3D software like 'Maya' utilizes Python to automate small user tasks or even for more complex integration like talking to databases and asset management systems.

Due to the combination of easy extensibility, good iteration time and good integration with the data base and other web standards, Python is popularly used in web development, although primarily on the back end.

Advantages

1. The code is easy to read and understand.
2. The standard library allows the execution of a lot of complex functionalities.
3. Supports multiple systems and platforms.
4. Python has a plethora of frameworks that make web programming flexible.
5. Gives rise to quick development using less code.
6. Built in testing framework enables fast workflows.

Disadvantages

1. Python is slow compared to other languages like C++.
2. It is not preferred for mobile development.
3. It is not a good choice for memory intensive tasks
4. There are limitations with database access.
5. IT is not good for multi-processor/multi-core work.

FLOWCHART OF FUNCTIONS / MODULES USED

Modules:-

- tkinter
- tkcalendar
- PIL
- tkinter.ttk
- pandas
- seaborn
- sys
- mysql.connector
- matplotlib
- matplotlib.backends.backend_tkagg
- random
- webbrowser

Packages:-

- GUI
- Anaconda
- Statsmodels

SOFTWARE DESCRIPTION

Machine Name	AVM03
Operating System	Windows 11Home Single Language 64-bit operating system (10.0, Build 22000)
Language	English (Regional Setting: English)
System Manufacturer	Dell Inc.
System Model	Inspiron 3501
BIOS	Default System BIOS
Processor	Intel(R) Core(TM) i3-1005G1 CPU @ 1.20GHz 1.19 GHz
Memory	4096 MB RAM
Available OS Memory	3978 MB RAM
Windows Dir	D:\Windows
DirectX Version	Direct X 12
DX Setup Parameters	Not found
User DPI Setting	Using System DPI
System DPI Setting	96 DPI (100 percent)
DWM DPI Scaling	Disabled

SQL QUERIES

Sql tables:

cust_id	email_id	username	paswrd	dob	fullname	mob	city	gender	bloodgrp	special
1	gem0912@gmail.com	Gemdihalide	Gem123	2005-12-09	Gembulingam	9832673351	Chennai	M	O+	Colour confused
748	smudger49@gmail.com	Smith	Batting	2007-12-07	Steve Smith	9842313566	Ahmedabad	M	O+	OCD
542	smrithi18@gmail.com	Smrithi	Lefthander	2005-04-11	Smrithi Mandhana	9876512636	Delhi	F	O+	
2	alpharex@gmail.com	Verse	Scooch12	2005-04-22	Vishal	9734673259	Chennai	M	A+	NULL
3	virat.kohli18@gmail.com	VK	VKAS18	2007-12-12	Virat Kohli	9043012345	Delhi	M	AB+	short temper
NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL	NULL

Client table

username	doc_name	cost	app_date	time
VK	Dr. Monishraj	75.000	2022-12-29 00:00:00	10:00 to 11:00
Gemdihalide	Dr. Monishraj	75.000	2022-12-24 00:00:00	10:00 to 11:00
Gemdihalide	Dr. Naren	35.000	2022-12-24 00:00:00	9:00 to 10:00
Gemdihalide	Dr. Gem	70.000	2022-12-31 00:00:00	19:30 to 20:30
Gemdihalide	Dr. Manavh	70.000	2022-12-14 00:00:00	19:00 to 20:00
Gemdihalide	Dr. Vignesh	45.000	2022-12-21 00:00:00	18:00 to 19:00
Gemdihalide	Dr. Jaideep	35.000	2022-12-21 00:00:00	20:30 to 21:30
Gemdihalide	Dr. Varsha	40.000	2022-12-21 00:00:00	11:00 to 12:00
Gemdihalide	Dr. Harini	35.000	2022-12-20 00:00:00	16:30 to 17:30
Gemdihalide	Dr. Chirag	55.000	2022-12-28 00:00:00	20:30 to 21:30
Gemdihalide	Dr. Shreya	60.000	2022-12-28 00:00:00	18:30 to 19:30

Appointment booking table

username	cbc	hemo	ppbs	fbs	serum	thyroid	lipid	vitD	amino	amylase	cholse	vitB12	cpk	bg	covid	mg	prolactin	Ca	K	lft	cost
Verse	2	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	7610

Test booking table

username	hd	cd	allergies	vaccine
Smith	-	-	Dust allergy	Yes
Verse	Hypertension	Asthma	Peanuts	Yes
NULL	NULL	NULL	NULL	NULL

Patient history table

```
create database avm;
use avm;
create table client(cust_id int,email_id varchar(40),
username varchar(20) PRIMARY KEY,paswrd varchar(30),
dob date,fullname varchar(60),mob bigint,city varchar(20),
gender varchar(2),bloodgrp varchar(3),special varchar(200));

create table bookdoc1 (username varchar(20) ,
doc_name varchar (20), cost float(5,3) ,
app_date datetime, time varchar (15),
foreign key (username) references client (username));

create table booktests (username varchar(20), cbc int, hemo int, ppbs int,
fbs int, serum int, thyroid int, lipid int,
vitD int, amino int, amylase int, cholse int,
vitB12 int, cpk int, bg int, covid int, mg int,
prolactin int, Ca int, K int, lft int, cost int,
foreign key (username) references client (username));

create table pahistory (username varchar (20) PRIMARY KEY, hd varchar (40),
cd varchar (40), allergies varchar (20), vaccine varchar (20),
foreign key (username) references client (username));
```

SOURCE CODE

```
import tkinter as tk
import tkcalendar as cale
from PIL import ImageTk, Image
from tkinter import ttk
from tkinter import BOTH, END, LEFT
from tkinter.ttk import Combobox
from tkinter import messagebox
from tkinter import Menu
from tkinter import Label
import pandas as pd
import sys
import mysql.connector as sql
import matplotlib
matplotlib.use("TkAgg")
from matplotlib import pyplot as plt
from matplotlib import dates as mpl_dates
from datetime import datetime, timedelta
from matplotlib.figure import Figure
from matplotlib.backends.backend_tkagg import (
    FigureCanvasTkAgg,
    NavigationToolbar2Tk
)
import random
import webbrowser as  wb
import statistics as st
window=tk.Tk()
window.geometry("2000x2000")
window.title("Home Page")
width=2000
height=2000
image = Image.open("hospital.png")
resize_image = image.resize((width, height))
img = ImageTk.PhotoImage(resize_image)
label1 = tk.Label(image=img)
label1.image = img
label1.pack()
greeting=tk.Label(text="AVM Multispeciality Hospital",font=("Times New
Roman",24))
greeting.place(x=575,y=5)
label=tk.Label(text="Healthcare Services",fg="red",bg="white",font=("Times New
Roman",36))
```

```
label.place(x=575,y=350)
txtfld1=tk.StringVar()
txtfl2=tk.StringVar()
txtfl3=tk.StringVar()
txtfld1a=tk.StringVar()
txtfld2a=tk.StringVar()
txtfld3a=tk.StringVar()
txtfld4a=tk.StringVar()
txtfld5a=tk.IntVar()
txtfld7=tk.StringVar()
txtfld4=tk.StringVar()
det=[]
cbc=0
hemo=0
ppbs=0
fbs=0
serum=0
thyroid=0
lipid=0
vitD=0
amino=0
amylase=0
cholse=0
vitB12=0
cpk=0
bg=0
covid=0
mg=0
prolactin=0
Ca=0
K=0
lft=0
un=""
option=""
test_cost=0
n1= tk.StringVar()
n2= tk.StringVar()
n3= tk.StringVar()
n4= tk.StringVar()
n5= tk.StringVar()
n6= tk.StringVar()
n7= tk.StringVar()
n8= tk.StringVar()
n9= tk.StringVar()
n10= tk.StringVar()
response=[]
```

```
hist1= tk.StringVar()
hist2= tk.StringVar()
hist3= tk.StringVar()
hist4= tk.StringVar()
def open1a():
    global top
    global un
    #top.destroy()
    messagebox.showinfo("Welcome!","Hello "+un)
    topA=tk.Toplevel(window)                #homepage-mainscreen
    topA.geometry("2000x2000")
    topA.title("Main screen")
    width=2000
    height=2000
    image = Image.open("hospital3.png")
    resize_image = image.resize((width, height))
    img = ImageTk.PhotoImage(resize_image)
    label1 = tk.Label(topA,image=img)
    label1.image = img
    lbl4=tk.Label(topA,text="Welcome Back",fg="black",font=("Times New
Roman",32))
    lbl4.place(x=600,y=20)
    label1.pack()
    def open3():#opens appointment window
        topC=tk.Toplevel(topA)
        topC.geometry("2000x2000")
        topC.title("Appointment")
        width=2000
        height=2000
        image = Image.open("hospital4alt.jpg")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(topC,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        b1=tk.Button(topC,text="View
schedule",width=20,height=4,bg="red",fg="yellow",font=("Times New Roman",20))
        b1.place(x=400,y=600)
        def open3a():
            topI=tk.Toplevel(topC)
            topI.geometry("2000x2000")
            topI.title("View Schedule")
            width=1700
            height=1000
            image = Image.open("hospital10.png")     #add image
            resize_image = image.resize((width, height))
```

```
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(topI,image=img)
        label1.image = img
        label1.pack()
        l1=tk.Label(topI,text="Show full schedule:",fg="blue",font=("Times New
Roman",20))
        l1.place(x=5,y=100)
        l2=tk.Label(topI,text="Filter by : morning
availability",fg="blue",font=("Times New Roman",20))
        l2.place(x=5,y=300)
        l3=tk.Label(topI,text="Filter by : evening availability",fg="blue",font=("Times
New Roman",20))
        l3.place(x=5,y=500)
        def open3a1():
            topJ=tk.Toplevel(topI)
            topJ.geometry("2000x2000")
            topJ.title("View full Schedule")
            width=1700
            height=1000
            filename = "D:\Python\docdata1.xlsx"
            df1 = pd.read_excel(filename, sheet_name = "Tables", engine='openpyxl')
            data1=pd.DataFrame(df1, columns=
['Chief_Doctors','Speciality','From','To'])
            txt = tk.Text(topJ)
            txt.pack()
            class PrintToTXT1(object):
                def write(self, s):
                    txt.insert(END, s)
            sys.stdout = PrintToTXT1()
            print(data1)
        def open3a2():
            topK=tk.Toplevel(topI)
            topK.geometry("2000x2000")
            topK.title("View Schedule filtered by timing")
            width=1700
            height=1000
            filename = "D:\Python\docdata1.xlsx"
            df2 = pd.read_excel(filename, sheet_name = "Tables", engine='openpyxl')
            data2=pd.DataFrame(df2, columns=
['Chief_Doctors','Speciality','From','To'])
            txt = tk.Text(topK)
            txt.pack()
            class PrintToTXT2(object):
                def write(self, s):
                    txt.insert(END, s)
            sys.stdout = PrintToTXT2()
```

```
            print(data2.head(4))
        def open3a3():
            topM=tk.Toplevel(topI)
            topM.geometry("2000x2000")
            topM.title("View Schedule filtered by timing")
            width=1700
            height=1000
            filename = "D:\Python\docdata1.xlsx"
            df3 = pd.read_excel(filename, sheet_name = "Tables", engine='openpyxl')
            data3=pd.DataFrame(df3, columns=
['Chief_Doctors','Speciality','From','To'])
            txt = tk.Text(topM)
            txt.pack()
            class PrintToTXT3(object):
                def write(self, s):
                    txt.insert(END, s)
            sys.stdout = PrintToTXT3()
            print(data3.tail(8))
        b1=tk.Button(topI,text="Select",width= 5,height=1,fg="green",
                bg="white",font=("Times New Roman",24),command=open3a1)
        b1.place(x=545,y=90)
        b2=tk.Button(topI,text="Select",width= 5,height=1,fg="green",
                bg="white",font=("Times New Roman",24),command=open3a2)
        b2.place(x=545,y=290)
        b3=tk.Button(topI,text="Select",width= 5,height=1,fg="green",
                bg="white",font=("Times New Roman",24),command=open3a3)
        b3.place(x=545,y=490)
    b1=tk.Button(topC,text="View
schedule",width=20,height=4,bg="red",fg="yellow",font=("Times New
Roman",20),command=open3a)
    b1.place(x=400,y=600)
    def open3c():
        topL=tk.Toplevel(topC)
        topL.geometry("2000x2000")
        topL.title("Book Appointment")
        width=1700
        height=1000
        image = Image.open("hospital10.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(topL,image=img)
        label1.image = img          #add extra stuff in screen
        lbl=tk.Label(topL,text="Please select speciality from above",
                fg="black",font=("Times New Roman",32))
        lbl.place(x=100,y=20)
        style= ttk.Style()
```

```
        style.theme_use("clam") #clam,alt,default,classic
        topL.option_add("*TCombobox*Listbox*selectBackground", "grey")
        topL.option_add("*TCombobox*Listbox*Background", "gold")
        doc_name=""
        cost=0

        #app_date=    #####
        def bookdoc(n):
            global  text
            global option
            global cost
            global doc_name
            global un
            option=n.get()
            print(option)
            mydb = sql.connect(host='localhost',
              database='avm',
              username='root',
              password='Vishvak03$'# change password acc to computer
              )
            cursor=mydb.cursor()
            ins="insert into bookdoc1(username,doc_name,cost,app_date,time) values
(%s,%s,%s,%s,%s)"
            data=(un,doc_name,cost,text,option)
            print(data)
            cursor.execute(ins,data)
            mydb.commit()
            mydb.close()
        def my_upd(cal,l1):             #dob entry
            global text
            text=cal.get_date()
            l1.config(text=cal.get_date())
        def General():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width=23,values=["9:00 to 10:00","10:00 to
11:00","11:00 to 12:00"],
                                  textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
```

```
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name="Dr. Monishraj"
            cost= 75
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Paediatrician():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["8:00 to 9:00","9:00 to
10:00"],
                                  textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Naren"
            cost= 35
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Cardiologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x =400 , y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["18:00 to 19:00","19:00
to 20:00"],
                                  textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
```

```
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))    #####
            b0.place(x=600,y=360)
            doc_name="Dr. Manavh"
            cost= 70
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",bg="blue",
                        font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Anaesthetist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black',
                        font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["17:00 to 18:00","18:00
to 19:00"],
                                textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))    #####
            b0.place(x=600,y=360)
            doc_name="Dr. Vignesh"
            cost= 45
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Dermatologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,
                                values = ["18:30 to 19:30","19:30 to 20:30","20:30 to
21:30"],textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
```

```
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Jaideep"
            cost=35
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Ophthalmologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,
                              values = ["10:00 to 11:00","11:00 to 12:00","12:00 to
13:00"],textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Varsha"
            cost= 40
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Oncologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["15:30 to 16:30","16:30
to 17:30"],
                              textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
```

```
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Harini"
            cost= 35
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Virologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["19:30 to 20:30","20:30
to 21:30"],
                                textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Chirag"
            cost= 55
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Radiologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["17:30 to 18:30","18:30
to 19:30"],
                                textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
```

```
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Shreya"
            cost= 60
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def ENT_specialist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["9:30 to 10:30","10:30
to 11:30","11:30 to 12:30"],
                                textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Pranav"
            cost= 35
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Neurologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,
                                values = ["18:30 to 19:30","19:30 to 20:30","20:30 to
21:30"],textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
```

```
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Gem"
            cost= 70
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def Pulmonologist():
            global option
            global doc_name
            global cost
            name1 = Label(topL, text="Slots are", fg='black', font=("Helvetica", 10))
            name1.place(x = 400, y = 100)
            n = tk.StringVar()
            option = ttk.Combobox(topL, width = 23,values = ["19:00 to 20:00","20:00
to 21:00"],
                                textvariable = n)
            option.place(x = 400, y = 125)
            option['state'] = 'readonly'
            cal=cale.DateEntry(topL,fg="red",bg="yellow")
            cal.place(x=400,y=360)
            l1=tk.Label(topL,text='data',bg='yellow')
            l1.place(x=800,y=360)
            b0=tk.Button(topL,text='Read', command=lambda:my_upd(cal,l1))     #####
            b0.place(x=600,y=360)
            doc_name= "Dr. Darshan"
            cost= 40
            bt1=tk.Button(topL, text= "Confirm", width = 5 , fg="yellow",
                        bg="blue", font=("Helvetica", 10),command=lambda:bookdoc(n))
            bt1.place(x=600,y=700)
        def window_setup():
            menu = Menu(topL, background = "black", activebackground = "gold")
            topL.config(menu = menu)
            gen = Menu(menu, background = "gold", activebackground = "grey")
#General
            menu.add_cascade(label='General', menu = gen)
            gen.add_command(label='Dr. Monishraj', command = General)
            peds = Menu(menu, background = "gold", activebackground = "grey")
#Paediatrician
            menu.add_cascade(label='Paediatrician', menu = peds)
            peds.add_command(label='Dr. Naren', command = Paediatrician)
            cardio = Menu(menu, background = "gold", activebackground = "grey")
#Cardiologist
```

```
            menu.add_cascade(label='Cardiologist', menu = cardio)
            cardio.add_command(label='Dr. Manavh', command = Cardiologist)
            ana = Menu(menu, background = "gold", activebackground = "grey")
#Anaesthetist
            menu.add_cascade(label='Anaesthetist', menu = ana)
            ana.add_command(label='Dr. Vignesh', command = Anaesthetist)
            derm = Menu(menu, background = "gold", activebackground = "grey")
#Dermatologist
            menu.add_cascade(label='Dermatologist', menu = derm)
            derm.add_command(label='Dr. Jaideep', command = Dermatologist)
            opth = Menu(menu, background = "gold", activebackground = "grey")
#Ophthalmologist
            menu.add_cascade(label='Ophthalmologist', menu = opth)
            opth.add_command(label='Dr. Varsha', command = Ophthalmologist)
            on = Menu(menu, background = "gold", activebackground = "grey")
#Oncologist
            menu.add_cascade(label='Oncologist', menu = on)
            on.add_command(label='Dr. Harini', command = Oncologist)
            viro = Menu(menu, background = "gold", activebackground = "grey")
#Virologist
            menu.add_cascade(label='Virologist', menu = viro)
            viro.add_command(label='Dr. Chirag', command = Virologist)
            rad = Menu(menu, background = "gold", activebackground = "grey")
#Radiologist
            menu.add_cascade(label='Radiologist', menu = rad)
            rad.add_command(label='Dr. Shreya', command = Radiologist)
            ent = Menu(menu, background = "gold", activebackground = "grey")
#ENT_specialist
            menu.add_cascade(label='ENT_specialist', menu = ent)
            ent.add_command(label='Dr. Pranav', command = ENT_specialist)
            neuro = Menu(menu, background = "gold", activebackground = "grey")
#Neurologist
            menu.add_cascade(label='Neurologist', menu = neuro)
            neuro.add_command(label='Dr. Gem', command = Neurologist)
            plum = Menu(menu, background = "gold", activebackground = "grey")
#Pulmonologist
            menu.add_cascade(label='Pulmonologist', menu = plum)
            plum.add_command(label='Dr. Darshan', command = Pulmonologist)
        window_setup()
        label1.pack()
    b2=tk.Button(topC,text="Book Appointment",width=20,height=4,bg="red",
                 fg="yellow",font=("Times New Roman",20),command=open3c)
    b2.place(x=400,y=200)
    def cbc_count():
        global test_cost
        global cbc
```

```
    cbc+=1
    test_cost+=390
    print(cbc)
def hemo_count():
    global test_cost
    global hemo
    hemo+=1
    test_cost+=300
    print(hemo)
def ppbs_count():
    global test_cost
    global ppbs
    ppbs+=1
    test_cost+=300
def fbs_count():
    global test_cost
    global fbs
    fbs+=1
    test_cost+=350
def serum_count():
    global test_cost
    global serum
    serum+=1
    test_cost+=400
def thyroid_count():
    global test_cost
    global thyroid
    thyroid+=1
    test_cost+=530
def lipid_count():
    global test_cost
    global lipid
    lipid+=1
    test_cost+=330
def vitD_count():
    global test_cost
    global vitD
    vitD+=1
    test_cost+=240
def amino_count():
    global test_cost
    global amino
    amino+=1
    test_cost+=400
def amylase_count():
    global test_cost
```

```
    global amylase
    amylase+=1
    test_cost+=360
def cholse_count():
    global test_cost
    global cholse
    cholse+=1
    test_cost+=470
def vitB12_count():
    global test_cost
    global vitB12
    vitB12+=1
    test_cost+=450
def cpk_count():
    global test_cost
    global cpk
    cpk+=1
    test_cost+=430
def bg_count():
    global test_cost
    global bg
    bg+=1
    test_cost+=420
def covid_count():
    global test_cost
    global covid
    covid+=1
    test_cost+=100
def mg_count():
    global test_cost
    global mg
    mg+=1
    test_cost+=320
def prolactin_count():
    global test_cost
    global prolactin
    prolactin+=1
    test_cost+=380
def Ca_count():
    global test_cost
    global Ca
    Ca+=1
    test_cost+=400
def K_count():
    global test_cost
    global K
```

```
            K+=1
            test_cost+=400
        def lft_count():
            global test_cost
            global  lft
            lft+=1
            test_cost+=300
        def book_test():########
            global test_cost
            global  un
            global cbc
            global hemo
            global ppbs
            global fbs
            global serum
            global thyroid
            global lipid
            global vitD
            global amino
            global amylase
            global cholse
            global vitB12
            global cpk
            global  bg
            global covid
            global mg
            global prolactin
            global Ca
            global K
            global lft
            mydb = sql.connect(host='localhost',
                  database='avm',
                  username='root',
                  password='Vishvak03$'# change password acc to computer
                  )
            cursor=mydb.cursor()
            ins="insert into
booktests(username,cbc,hemo,ppbs,fbs,serum,thyroid,lipid,vitD,amino,amylase,cholse
,vitB12,cpk,bg,covid,mg,prolactin,Ca,K,lft,cost) values
(%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)"
            data=(un,cbc,hemo,ppbs,fbs,
                serum,thyroid,lipid,vitD,
                amino,amylase,cholse,vitB12,
                cpk,bg,covid,mg,prolactin,
                Ca,K,lft,test_cost)
            print(data)
```

```
            cursor.execute(ins,data)
            mydb.commit()
            mydb.close()
        def open3b1(): #opens book tests window
            topH=tk.Toplevel(topC)
            topH.geometry("2000x2000")
            topH.title("Book Tests page 1 of 2")
            scrollbar=tk.Scrollbar(topH)
            scrollbar.pack( side = tk.RIGHT,  fill = tk.Y )
            mylist = tk.Listbox(topH, yscrollcommand = scrollbar.set )
            width=2000
            height=2000
            image = Image.open("hospitalbooktests.jpg")     #add image
            resize_image = image.resize((width, height))
            img = ImageTk.PhotoImage(resize_image)
            label1 = tk.Label(topH,image=img)
            label1.image = img          #add extra stuff in screen
            label1.pack()
            l1=tk.Label(topH,text="Complete Blood Count / Hemogram
(CBC)",fg="blue",font=("Times New Roman",20))
            l1.place(x=5,y=100)
            l2=tk.Label(topH,text="Hemoglobin",fg="blue",font=("Times New
Roman",20))
            l2.place(x=5,y=200)
            l3=tk.Label(topH,text="Post Prandial Blood Sugar
(PPBS)",fg="blue",font=("Times New Roman",20))
            l3.place(x=5,y=300)
            l4=tk.Label(topH,text="Fasting Blood Sugar (FBS)",fg="blue",font=("Times
New Roman",20))
            l4.place(x=5,y=400)
            l5=tk.Label(topH,text="Serum Electrolytes",fg="blue",font=("Times New
Roman",20))
            l5.place(x=5,y=500)
            l6=tk.Label(topH,text="Thyroid Profile",fg="blue",font=("Times New
Roman",20))
            l6.place(x=700,y=100)
            l7=tk.Label(topH,text="Lipid Profile",fg="blue",font=("Times New
Roman",20))
            l7.place(x=700,y=200)
            l8=tk.Label(topH,text="Vitamin D Total",fg="blue",font=("Times New
Roman",20))
            l8.place(x=700,y=300)
            l9=tk.Label(topH,text="Amino Acid Profile",fg="blue",font=("Times New
Roman",20))
            l9.place(x=700,y=400)
            l10=tk.Label(topH,text="Amylase",fg="blue",font=("Times New Roman",20))
```

```
        l10.place(x=700,y=500)
        b1=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=cbc_count)
        b1.place(x=545,y=90)
        b2=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=hemo_count)
        b2.place(x=545,y=190)
        b3=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=ppbs_count)
        b3.place(x=545,y=290)
        b4=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=fbs_count)
        b4.place(x=545,y=390)
        b5=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=serum_count)
        b5.place(x=545,y=490)
        b6=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=thyroid_count)
        b6.place(x=1200,y=90)
        b7=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=lipid_count)
        b7.place(x=1200,y=190)
        b8=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=vitD_count)
        b8.place(x=1200,y=290)
        b9=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=amino_count)
        b9.place(x=1200,y=390)
        b10=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                 activebackground='#00ff00',font=("Times New
Roman",24),command=amylase_count)
        b10.place(x=1200,y=490)
        b21=tk.Button(topH,text="BACK",width= 5,height=1,fg="green",bg="white",
                 activebackground='#00ff00',font=("Times New
Roman",24),command=topH.destroy)
        b21.place(x=545,y=600)
        b22=tk.Button(topH,text="NEXT",width= 5,height=1,fg="green",bg="white",
```

```
                activebackground='#00ff00',font=("Times New
Roman",24),command=open3b2)
        b22.place(x=1200,y=600)
    def open3b2():
        topH=tk.Toplevel(topC)
        topH.geometry("2000x2000")
        topH.title("Book Tests page 2 of 2")
        scrollbar=tk.Scrollbar(topH)
        scrollbar.pack( side = tk.RIGHT,  fill = tk.Y )
        mylist = tk.Listbox(topH, yscrollcommand = scrollbar.set )
        width=2000
        height=2000
        image = Image.open("hospitalbooktests.jpg")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(topH,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        l11=tk.Label(topH,text="Total Cholesterol",fg="blue",font=("Times New
Roman",20))
        l11.place(x=5,y=100)
        l12=tk.Label(topH,text="Vitamin B12",fg="blue",font=("Times New
Roman",20))
        l12.place(x=5,y=200)
        l13=tk.Label(topH,text="CPK (Muscle / Brain)",fg="blue",font=("Times New
Roman",20))
        l13.place(x=5,y=300)
        l14=tk.Label(topH,text="Blood Group",fg="blue",font=("Times New
Roman",20))
        l14.place(x=5,y=400)
        l15=tk.Label(topH,text="Covid IgG Antibody Test",fg="blue",font=("Times
New Roman",20))
        l15.place(x=5,y=500)
        l16=tk.Label(topH,text="Magnesium",fg="blue",font=("Times New
Roman",20))
        l16.place(x=700,y=100)
        l17=tk.Label(topH,text="Prolactin",fg="blue",font=("Times New Roman",20))
        l17.place(x=700,y=200)
        l18=tk.Label(topH,text="Calcium (Ca)",fg="blue",font=("Times New
Roman",20))
        l18.place(x=700,y=300)
        l19=tk.Label(topH,text="Potassium (K+)",fg="blue",font=("Times New
Roman",20))
        l19.place(x=700,y=400)
        l20=tk.Label(topH,text="Liver Function Test (LFT)",fg="blue",font=("Times
New Roman",20))
```

```
        l20.place(x=700,y=500)
        b11=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=cholse_count)
        b11.place(x=545,y=90)
        b12=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=vitB12_count)
        b12.place(x=545,y=190)
        b13=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=cpk_count)
        b13.place(x=545,y=290)
        b14=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=bg_count)
        b14.place(x=545,y=390)
        b15=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=covid_count)
        b15.place(x=545,y=490)
        b16=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=mg_count)
        b16.place(x=1200,y=90)
        b17=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=prolactin_count)
        b17.place(x=1200,y=190)
        b18=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=Ca_count)
        b18.place(x=1200,y=290)
        b19=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=K_count)
        b19.place(x=1200,y=390)
        b20=tk.Button(topH,text="Select",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=lft_count)
        b20.place(x=1200,y=490)
        b21=tk.Button(topH,text="BACK",width= 5,height=1,fg="green",bg="white",
                activebackground='#00ff00',font=("Times New
Roman",24),command=topH.destroy)
        b21.place(x=545,y=600)
```

```
        b22=tk.Button(topH,text="CONFIRM",width=
7,height=1,fg="green",bg="white",
                      activebackground='#00ff00',font=("Times New
Roman",24),command=book_test)
        b22.place(x=1200,y=600)
      b3=tk.Button(topC,text="Book tests",width=20,height=4,bg="red",fg="yellow",
                font=("Times New Roman",20),command=open3b1)
      b3.place(x=800,y=200)
   b1=tk.Button(topA,text="Appointments",width=10,height=2,bg="yellow",
            fg="red",font=("Times New Roman",18),command=open3)
   b1.place(x=400,y=600)
   def open4(): #self check window
      topD=tk.Toplevel(topA)
      topD.geometry("2000x2000")
      topD.title("Self Check")
      width=1500
      height=800
      image = Image.open("hospitalselfcheck.png")     #add image
      resize_image = image.resize((width, height))
      img = ImageTk.PhotoImage(resize_image)
      label1 = tk.Label(topD,image=img)
      label1.image = img          #add extra stuff in screen
      label1.pack()
      l1=tk.Label(topD,text="To assess your condition, click the button below:",
               fg="purple",bg="yellow",font=("Times New Roman",24))
      l1.place(x=100,y=100)
      l2=tk.Label(topD,text="To take up a quiz on safety precautions, click the button
below:",
               fg="purple",bg="yellow",font=("Times New Roman",24))
      l2.place(x=100,y=400)
      def quesfinish():
         global response
         q11=tk.Toplevel(topD)
         q11.geometry("2000x2000")
         q11.title("Self Test - End")
         width=1500
         height=800
         image = Image.open("hospitalselfcheck.png")     #add image
         resize_image = image.resize((width, height))
         img = ImageTk.PhotoImage(resize_image)
         label1 = tk.Label(q11,image=img)
         label1.image = img          #add extra stuff in screen
         label1.pack()
         lb1=tk.Label(q11,text="Results based on the answers to the previous 10
questions:",
                      width=100,height=2,fg="black",font=("Times New Roman",14))
```

```
        lb1.place(x=5, y=20)
        if int(response[0])<8:
            if int(response[0])<5:

lbl1=tk.Label(q11,text="Unhealthy",width=100,height=2,fg="black",font=("Times
New Roman",14))
                lbl1.place(x=50, y=100)
            else:
                lbl2=tk.Label(q11,text="Healthy, keep track of your health",
                        width=100,height=2,fg="black",font=("Times New Roman",14))
                lbl2.place(x=50, y=100)
        else:

lbl6=tk.Label(q11,text="Healthy",width=100,height=2,fg="black",font=("Times New
Roman",14))
            lbl6.place(x=50, y=100)
        if response[1] in ['Several days','More days than not','Nearly every day']:
            if response[1]!="Nearly every day":
                lbl3=tk.Label(q11,text="Try to talk about your anxieties to someone.",
                        width=100,height=2,fg="black",font=("Times New Roman",14))
                lbl3.place(x=50, y=175)
            else:
                lbl8=tk.Label(q11,text="Consult a therapist immedietely",
                        width=100,height=2,fg="black",font=("Times New Roman",14))
                lbl8.place(x=50, y=175)
        else:
            lbl7=tk.Label(q11,text="Mentally Healthy",width=100,
                    height=2,fg="black",font=("Times New Roman",14))
            lbl7.place(x=50, y=175)
        if response[2] in ['1','2','3','4','5']:
            if int(response[2])<3:
                lbl4=tk.Label(q11,text="Exercise Regularly",width=100,
                        height=2,fg="black",font=("Times New Roman",14))
                lbl4.place(x=50, y=250)
            else:
                lbl5=tk.Label(q11,text="Continue Exercising
Regularly",width=100,height=2,
                        fg="black",font=("Times New Roman",14))
                lbl5.place(x=50, y=250)
        else:
            lbl9=tk.Label(q11,text="Continue Exercising Regularly, keep up the good
physical work :)",
                    width=100,height=2,fg="black",font=("Times New Roman",14))
            lbl9.place(x=50, y=250)
        bt1=tk.Button(q11,text="Return to
homepage",width=100,height=2,fg="black",
```

```
                font=("Times New Roman",14),command=q11.destroy)
        bt1.place(x=200,y=500)
    def nn10(n10):
        global response
        an10=n10.get()
        response.append(an10)
    def next10():
        global n10
        q10=tk.Toplevel(topD)
        q10.geometry("2000x2000")
        q10.title("Question 10")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q10,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q10,
                text="10. On how many of the last 7 days did you engage in moderate
to strenuous exercise (like a brisk walk)?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q10, width = 27, textvariable = n10)
        a1['values'] = ('0','1','2','3','4','5','6','7')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q10,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[quesfinish(),nn10(n10)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q10,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[next9(),q10.destroy()])
        bt2.place(x=800,y=660)
    def nn9(n9):
        an9=n9.get()
    def next9():
        global n9
        q9=tk.Toplevel(topD)
        q9.geometry("2000x2000")
        q9.title("Question 9")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
```

```
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q9,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q9,
                text="9. How often do you have trouble taking medicines the way you
have been told to take them?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q9, width = 27, textvariable = n9)
        a1['values'] = ('I do not have to take medicine',
                 'I always take them as prescribed',
                 'Sometimes I take them as prescribed',
                 'I seldom take them as prescribed')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q9,text="Next",width=10,height=2,fg="black",
                 font=("Times New
Roman",14),command=lambda:[next10(),q9.destroy(),nn9(n9)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q9,text="Back",width=10,height=2,fg="black",
                 font=("Times New
Roman",14),command=lambda:[next8(),q9.destroy()])
        bt2.place(x=800,y=660)
    def nn8(n8):
        an8=n8.get()
    def next8():
        global n8
        q8=tk.Toplevel(topD)
        q8.geometry("2000x2000")
        q8.title("Question 8")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q8,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q8,
                text="8. Over the past 2 weeks, how often have you felt little interest
or pleasure in doing things?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q8, width = 27, textvariable = n8)
```

```
        a1['values'] = ('Not at all','Several days','More days than not','Nearly every
day')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q8,text="Next",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next9(),q8.destroy(),nn8(n8)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q8,text="Back",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next7(),q8.destroy()])
        bt2.place(x=800,y=660)
    def nn7(n7):
        global response
        an7=n7.get()
        response.append(an7)
    def next7():
        global n7
        q7=tk.Toplevel(topD)
        q7.geometry("2000x2000")
        q7.title("Question 7")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q7,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q7,
                text="7. Over the past 2 weeks, how often have you felt down,
depressed, or hopeless?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q7, width = 27, textvariable = n7)
        a1['values'] = ('Not at all','Several days','More days than not','Nearly every
day')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q7,text="Next",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next8(),q7.destroy(),nn7(n7)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q7,text="Back",width=10,height=2,
                fg="black",font=("Times New
Roman",14),command=lambda:[next6(),q7.destroy()])
```

```
        bt2.place(x=800,y=660)
    def nn6(n6):
        an6=n6.get()
    def next6():
        global n6
        q6=tk.Toplevel(topD)
        q6.geometry("2000x2000")
        q6.title("Question 6")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q6,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q6,text="6. Over the past 2 weeks, how often have you felt
nervous, anxious, or on edge?",fg="purple",bg="yellow",font=("Times New
Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q6, width = 27, textvariable = n6)
        a1['values'] = ('Not at all','Several days','More days than not','Nearly every
day') #values:It specifies the list of values to display in the drop-down listbox.
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q6,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[next7(),q6.destroy(),nn6(n6)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q6,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[next5(),q6.destroy()])
        bt2.place(x=800,y=660)
    def nn5(n5):
        an5=n5.get()
    def next5():
        global n5
        q5=tk.Toplevel(topD)
        q5.geometry("2000x2000")
        q5.title("Question 5")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q5,image=img)
```

```
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q5,text="5. Do you have any hereditary conditions/diseases?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q5, width = 27, textvariable = n5)
        a1['values'] = ('High blood
pressure','Diabetes','Hemophilia','Thalassemia','Huntington','Other')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q5,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[next6(),q5.destroy(),nn5(n5)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q5,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[next4(),q5.destroy()])
        bt2.place(x=800,y=660)
    def nn4(n4):
        an4=n4.get()
    def next4():
        global n4
        q4=tk.Toplevel(topD)
        q4.geometry("2000x2000")
        q4.title("Question 4")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q4,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q4,text="4. Do you have any chronic diseases?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q4, width = 27, textvariable = n4)
        a1['values'] = ('Yes','No')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q4,text="Next",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next5(),q4.destroy(),nn4(n4)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q4,text="Back",width=10,height=2,fg="black",
```

```
                font=("Times New
Roman",14),command=lambda:[next3(),q4.destroy()])
        bt2.place(x=800,y=660)
    def nn3(n3):
        an3=n3.get()
    def next3():
        global n3
        q3=tk.Toplevel(topD)
        q3.geometry("2000x2000")
        q3.title("Question 3")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q3,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q3,text="3. What do you say about your overall health?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q3, width = 27, textvariable = n3)
        a1['values'] = ('Having Good Physical Health','Moderately physically
impaired',
                 'Severely physically impaired','Totally physically impaired')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q3,text="Next",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next4(),q3.destroy(),nn3(n3)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q3,text="Back",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next2(),q3.destroy()])
        bt2.place(x=800,y=660)
    def nn2(n2):
        global response
        an2=n2.get()
        response.append(an2)
    def next2():
        global n2
        q2=tk.Toplevel(topD)
        q2.geometry("2000x2000")
        q2.title("Question 2")
        width=1500
        height=800
```

```
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q2,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q2,text="2. How often do you get a health checkup?",
                     fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q2, width = 27, textvariable = n2)
        a1['values'] = ('Once in 3 months','Once in 6 months',
                        'Once a year','Only when needed','Never get it done')
        a1.current()
        a1.place(x=340,y=380)
        bt1=tk.Button(q2,text="Next",width=10,height=2,fg="black",
                      font=("Times New
Roman",14),command=lambda:[next3(),q2.destroy(),nn2(n2)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q2,text="Back",width=10,height=2,fg="black",
                      font=("Times New
Roman",14),command=lambda:[next1(),q2.destroy()])
        bt2.place(x=800,y=660)
    def nn1(n1):
        global response
        an1=n1.get()
        response.append(an1)
    def next1():
        global n1
        q1=tk.Toplevel(topD)
        q1.geometry("2000x2000")
        q1.title("Question 1")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q1,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q1,text="1. How healthy do you consider yourself on a scale of 1
to 10?",
                     fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        a1= ttk.Combobox(q1, width = 27, textvariable = n1)
        a1['values'] = ('1','2','3','4','5','6','7','8','9','10')
        a1.current()
```

```
        a1.place(x=340,y=380)
        bt1=tk.Button(q1,text="Next",width=10,height=2,fg="black",
                font=("Times New
Roman",14),command=lambda:[next2(),q1.destroy(),nn1(n1)])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q1,text="Back",width=10,height=2,fg="black",
                font=("Times New Roman",14),command=q1.destroy)
        bt2.place(x=800,y=660)
    b1=tk.Button(topD,text="Start",width=10,height=4,bg="yellow",
            fg="red",font=("Times New Roman",20),command=next1)
    b1.place(x=400,y=200)
    b1=tk.Button(topD,text="Start",width=10,height=4,bg="yellow",
            fg="red",font=("Times New Roman",20),command=next1)
    b1.place(x=400,y=200)
    def sel():
        global var
        selection = "You selected the option " + var.get()
        label.config(text = selection)
    def qzfinish():
        global var
        q11=tk.Toplevel(topD)
        q11.geometry("2000x2000")
        q11.title("Qustions - End")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q11,image=img)
        label1.image = img
        label1.pack()
        lb1=tk.Label(q11,text="Results:",width=10,height=2,fg="black",font=("Times
New Roman",14))
        lb1.place(x=5, y=20)
        bt1=tk.Button(q11,text="Return to homepage",width=20,height=2,
                fg="black",font=("Times New Roman",14),command=q11.destroy)
        bt1.place(x=200,y=500)
    def qz10():
        global var
        q10=tk.Toplevel(topD)
        q10.geometry("2000x2000")
        q10.title("Question 10")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
```

```
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q10,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q10,text="10. If someone near you has been electrocuted, when
should that person see a doctor?",
                     fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel10():
           s=var.get()
           selection = "You selected the option " + s
           label1.config(text = selection)
           label2.config(text = "The correct option is B. Electrocution victims should
ALWAYS see a doctor.")
        R1 = tk.Radiobutton(q10, text="A. If the electrocution was bad enough to
cause burns",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="A",command=sel10)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q10, text="B. Electrocution victims should ALWAYS
see a doctor.",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="B",command=sel10)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q10, text="C. Electrocution victims never have to see a
doctor",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="C",command=sel10)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q10, text="D. If the electrocution causes tremors or
confusion",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="D",command=sel10)
        R4.place(x=100,y=400)
        label1 = tk.Label(q10,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q10,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q10,text="Next",width=10,height=2,fg="black",
                      font=("Times New
Roman",14),command=lambda:[qzfinish(),q10.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q10,text="Back",width=10,height=2,fg="black",
                      font=("Times New
Roman",14),command=lambda:[qz9(),q10.destroy()])
```

```
        bt2.place(x=800,y=660)
    def qz9():
        global var
        q9=tk.Toplevel(topD)
        q9.geometry("2000x2000")
        q9.title("Question 9")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q9,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q9,
                text="9. You are at a pool party, and a friend gets stuck under water.
When he is pulled out of the water, he is unconscious. What should you do before you
start CPR or mouth-to-mouth resuscitation?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel9():
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is B. Put your ear to the person's
nose to check if he or she is breathing.")
        R1 = tk.Radiobutton(q9, text="A. Poke the person's toe with a needle to check
for reflexes",
                        fg="blue",font=("Times New Roman",24), variable=var,
value="A",command=sel9)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q9,
                        text="B. Put your ear to the person's nose to check if he or she is
breathing.",
                        fg="blue",font=("Times New Roman",24), variable=var,
value="B",command=sel9)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q9,
                        text="C. Pinch the person's face to bring back consciousness",
                        fg="blue",font=("Times New Roman",24), variable=var,
value="C",command=sel9)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q9, text="D. Splash the person's face with water to shock
him awake",
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                    fg="blue",font=("Times New Roman",24), variable=var,
value="D",command=sel9)
        R4.place(x=100,y=400)
        label1 = tk.Label(q9,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q9,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q9,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                  command=lambda:[qz10(),q9.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q9,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                  command=lambda:[qz8(),q9.destroy()])
        bt2.place(x=800,y=660)
    def qz8():
        global var
        q8=tk.Toplevel(topD)
        q8.geometry("2000x2000")
        q8.title("Question 8")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q8,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q8,
                  text="8. If someone you know becomes disoriented or loses alertness,
which of these questions should you NOT ask him or her?",
                  fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel8():
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is D. What is the square root of
164,752?.")
        R1 = tk.Radiobutton(q8, text="A. How old are you?",fg="blue",font=("Times
New Roman",24),
                    variable=var, value="A",command=sel8)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q8, text="B. What is the date?",fg="blue",
```

```
                font=("Times New Roman",24), variable=var,
value="B",command=sel8)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q8, text="C. What is your
name?",fg="blue",font=("Times New Roman",24),
                variable=var, value="C",command=sel8)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q8, text="D. What is the square root of
164,752?.",fg="blue",
                font=("Times New Roman",24), variable=var,
value="D",command=sel8)
        R4.place(x=100,y=400)
        label1 = tk.Label(q8,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q8,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q8,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[qz9(),q8.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q8,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                command=lambda:[qz7(),q8.destroy()])
        bt2.place(x=800,y=660)
    def qz7():
        global var
        q7=tk.Toplevel(topD)
        q7.geometry("2000x2000")
        q7.title("Question 7")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q7,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q7,text="7. How do you help a choking person?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel7():
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is B. Begin back blows.")
```

```
        R1 = tk.Radiobutton(q7, text="A. Make them sit properly",fg="blue",
                            font=("Times New Roman",24), variable=var,
value="A",command=sel7)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q7, text="B. Begin back blows.",fg="blue",font=("Times
New Roman",24),
                            variable=var, value="B",command=sel7)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q7, text="C. Call 911",fg="blue",font=("Times New
Roman",24),
                            variable=var, value="C",command=sel7)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q7, text="D. Make them sleep",fg="blue",
                            font=("Times New Roman",24), variable=var,
value="D",command=sel7)
        R4.place(x=100,y=400)
        label1 = tk.Label(q7,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q7,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q7,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[qz8(),q7.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q7,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[qz6(),q7.destroy()])
        bt2.place(x=800,y=660)
    def qz6():
        global var
        q6=tk.Toplevel(topD)
        q6.geometry("2000x2000")
        q6.title("Question 6")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q6,image=img)
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q6,text="6. What determines you to use CPR?",fg="purple",
                     bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel6():
```

```
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is C. If someone is not breathing
normally.")
        R1 = tk.Radiobutton(q6, text="A. When a person is not moving",fg="blue",
                        font=("Times New Roman",24), variable=var,
value="A",command=sel6)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q6, text="B. When a person is low in energy",fg="blue",
                        font=("Times New Roman",24), variable=var,
value="B",command=sel6)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q6, text="C. If someone is not breathing normally.",
                        fg="blue",font=("Times New Roman",24), variable=var,
value="C",command=sel6)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q6, text="D. All of the above",fg="blue",font=("Times
New Roman",24),
                        variable=var, value="D",command=sel6)
        R4.place(x=100,y=400)
        label1 = tk.Label(q6,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q6,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q6,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz7(),q6.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q6,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz5(),q6.destroy()])
        bt2.place(x=800,y=660)
    def qz5():
        global var
        q5=tk.Toplevel(topD)
        q5.geometry("2000x2000")
        q5.title("Question 5")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q5,image=img)
        lbl=tk.Label(q5,text="5. Which of these is not a sign of heatstroke?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
```

```
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel5():
           s=var.get()
           selection = "You selected the option " + s
           label1.config(text = selection)
           label2.config(text = "The correct option is A. Nose bleeding.")
        R1 = tk.Radiobutton(q5, text="A. Nose bleeding.",fg="blue",font=("Times
New Roman",24),
                        variable=var, value="A",command=sel5)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q5, text="B. Muscle cramps",fg="blue",font=("Times
New Roman",24),
                        variable=var, value="B",command=sel5)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q5, text="C. Nausea or
vomiting",fg="blue",font=("Times New Roman",24),
                        variable=var, value="C",command=sel5)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q5, text="D. None of the above",fg="blue",font=("Times
New Roman",24),
                        variable=var, value="D",command=sel5)
        R4.place(x=100,y=400)
        label1 = tk.Label(q5,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q5,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q5,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz6(),q5.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q5,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz4(),q5.destroy()])
        bt2.place(x=800,y=660)
      def qz4():
        global var
        q4=tk.Toplevel(topD)
        q4.geometry("2000x2000")
        q4.title("Question 4")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")     #add image
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q4,image=img)
```

```
        label1.image = img          #add extra stuff in screen
        label1.pack()
        lbl=tk.Label(q4,
                text="4. Which of the following is a common sign or symptom of a
patient experiencing a diabetic emergency?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel4():
           s=var.get()
           selection = "You selected the option " + s
           label1.config(text = selection)
           label2.config(text = "The correct option is B. Pale, clammy skin.")
        R1 = tk.Radiobutton(q4, text="A. Slow pulse",fg="blue",font=("Times New
Roman",24),
                        variable=var, value="A",command=sel4)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q4, text="B. Pale, clammy skin.",fg="blue",font=("Times
New Roman",24),
                        variable=var, value="B",command=sel4)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q4, text="C. Elevated blood
pressure",fg="blue",font=("Times New Roman",24),
                        variable=var, value="C",command=sel4)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q4, text="D. Decreased respiratory
rate",fg="blue",font=("Times New Roman",24),
                        variable=var, value="D",command=sel4)
        R4.place(x=100,y=400)
        label1 = tk.Label(q4,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q4,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q4,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz5(),q4.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q4,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz3(),q4.destroy()])
        bt2.place(x=800,y=660)
    def qz3():
        global var
        q3=tk.Toplevel(topD)
        q3.geometry("2000x2000")
        q3.title("Question 3")
```

```
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q3,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q3,
                text="3. The victim has pale or bluish skin color, cold skin, and dull or
sunken eyes. These are symptoms of which health emergency?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel3():
           s=var.get()
           selection = "You selected the option " + s
           label1.config(text = selection)
           label2.config(text = "The correct option is B. Shock.")
        R1 = tk.Radiobutton(q3, text="A. High fever",fg="blue",font=("Times New
Roman",24),
                        variable=var, value="A",command=sel3)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q3, text="B. Shock.",fg="blue",font=("Times New
Roman",24),
                        variable=var, value="B",command=sel3)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q3, text="C. Heart attack",fg="blue",font=("Times New
Roman",24),
                        variable=var, value="C",command=sel3)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q3, text="D. None of the above",fg="blue",
                        font=("Times New Roman",24), variable=var,
value="D",command=sel3)
        R4.place(x=100,y=400)
        label1 = tk.Label(q3,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q3,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q3,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz4(),q3.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q3,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                    command=lambda:[qz2(),q3.destroy()])
```

```
        bt2.place(x=800,y=660)
    def qz2():
        global var
        q2=tk.Toplevel(topD)
        q2.geometry("2000x2000")
        q2.title("Question 2")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q2,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q2,text="2. If a person has a bleeding wound, what should you
do?",
                fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel2():
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is D. B and C.")
        R1 = tk.Radiobutton(q2, text="A. Apply a tourniquet right away",fg="blue",
                font=("Times New Roman",24), variable=var,
value="A",command=sel2)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q2, text="B. Cover the wound with a clean
cloth",fg="blue",
                font=("Times New Roman",24), variable=var,
value="B",command=sel2)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q2, text="C. Put continuous pressure on the wound with
the palm of your hand",
                fg="blue",font=("Times New Roman",24), variable=var,
value="C",command=sel2)
        R3.place(x=100,y=300)
        R4 = tk.Radiobutton(q2, text="D. B and C.",fg="blue",font=("Times New
Roman",24),
                variable=var, value="D",command=sel2)
        R4.place(x=100,y=400)
        label1 = tk.Label(q2,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q2,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
```

```
        bt1=tk.Button(q2,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[qz3(),q2.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q2,text="Back",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[qz1(),q2.destroy()])
        bt2.place(x=800,y=660)
    def qz1():
        global var
        q1=tk.Toplevel(topD)
        q1.geometry("2000x2000")
        q1.title("Question 1")
        width=1500
        height=800
        image = Image.open("hospitalselfcheck.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(q1,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(q1,text="1. If you need to call 911 in an emergency, what should
you tell the dispatcher?",
                     fg="purple",bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        var = tk.StringVar()
        def sel1():
            s=var.get()
            selection = "You selected the option " + s
            label1.config(text = selection)
            label2.config(text = "The correct option is D. All of the above.")
        R1 = tk.Radiobutton(q1, text="A. Describe the
emergency",fg="blue",font=("Times New Roman",24),
                            variable=var, value="A",command=sel1)
        R1.place(x=100,y=100)
        R2 = tk.Radiobutton(q1, text="B. Give your name and the telephone number
of the phone you are using to make the call",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="B",command=sel1)
        R2.place(x=100,y=200)
        R3 = tk.Radiobutton(q1, text="C. Give the exact address where the emergency
occurred",
                            fg="blue",font=("Times New Roman",24), variable=var,
value="C",command=sel1)
        R3.place(x=100,y=300)
```

```
        R4 = tk.Radiobutton(q1, text="D. All of the above.",fg="blue",font=("Times
New Roman",24),
                            variable=var, value="D",command=sel1)
        R4.place(x=100,y=400)
        label1 = tk.Label(q1,fg="purple",font=("Times New Roman",18))
        label1.place(x=100,y=500)
        label2 = tk.Label(q1,fg="purple",font=("Times New Roman",18))
        label2.place(x=100,y=550)
        bt1=tk.Button(q1,text="Next",width=10,height=2,fg="black",font=("Times
New Roman",14),
                      command=lambda:[qz2(),q1.destroy()])
        bt1.place(x=340,y=660)
        bt2=tk.Button(q1,text="Back",width=10,height=2,fg="black",
                      font=("Times New Roman",14),command=q1.destroy)
        bt2.place(x=800,y=660)
    b2=tk.Button(topD,text="Start",width=10,height=4,bg="yellow",fg="red",
                 font=("Times New Roman",20),command=qz1)
    b2.place(x=400,y=500)
    b3=tk.Button(topD,text="return to \nhome
page",width=20,height=4,bg="yellow",
                 fg="red",font=("Times New Roman",16),command=topD.destroy)
    b3.place(x=800,y=600)
  b2=tk.Button(topA,text="Self Check",width=10,height=2,bg="yellow",fg="red",
               font=("Times New Roman",18),command=open4)
  b2.place(x=800,y=600)
  def open5():        #about us screen
    def graph():
      def graphnxt():
        plt.style.use('seaborn')
        topEnxt=tk.Tk()
        topEnxt.geometry("2000x2000")
        topEnxt.title("graph")
        width=2000
        height=2000
        matplotlib.use('TkAgg')
        f = Figure(figsize=(5,5), dpi=100)
        a = f.add_subplot(111)
        dates = [
          datetime(2020, 2, 1),
          datetime(2020, 3, 1),
          datetime(2020, 4, 1),
          datetime(2020, 5, 1),
          datetime(2020, 6, 1),
          datetime(2020, 7, 1),
          datetime(2020, 8, 1),
          datetime(2020, 9, 1),
```

```
    datetime(2020, 10, 1),
    datetime(2020, 11, 1),
    datetime(2020, 12, 1),
    datetime(2021, 1, 1),
    datetime(2021, 2, 1),
    datetime(2021, 3, 1),
    datetime(2021, 4, 1),
    datetime(2021, 5, 1),
    datetime(2021, 6, 1),
    datetime(2021, 7, 1),
    datetime(2021, 8, 1),
    datetime(2021, 9, 1),
    datetime(2021, 10, 1),
    datetime(2021, 11, 1),
    datetime(2021, 12, 1),
    datetime(2022, 1, 1),
    datetime(2022, 2, 1),
    datetime(2022, 3, 1),
    datetime(2022, 4, 1),
    datetime(2022, 5, 1),
    datetime(2022, 6, 1),
    datetime(2022, 7, 1),
    datetime(2022, 8, 1),
    datetime(2022, 9, 1),
    datetime(2022, 10, 1),
]

y = [3,20,120,430,
     880,2000,2500,7000,
     8000,9300,16000,16400,
     12000,15000,23500,41000,
     53000,73000,40000,30000,
     20000,10000,5000,100000,
     350000,75000,5000,2500,
     20000,2000,5000,2500,
     500
     ]
temp2=y
figure = Figure(figsize=(6, 4), dpi=100)
figure_canvas = FigureCanvasTkAgg(figure, topEnxt)
NavigationToolbar2Tk(figure_canvas, topEnxt)
axes = figure.add_subplot()
axes.plot(dates,y)
axes.plot(dates, y,linestyle='solid')
plt.gcf().autofmt_xdate()
date_format=mpl_dates.DateFormatter('%b,%m,%Y')
```

```
            axes.set_title('Covid 19 deaths average per month in India')
            axes.set_ylabel('deaths')
            figure_canvas.get_tk_widget().pack(side=tk.TOP, fill=tk.BOTH, expand=1)
            def stat():
               nonlocal temp1
               nonlocal temp2
               topEst=tk.Toplevel(topE)
               topEst.geometry("2000x2000")
               topEst.title("About us")
               width=2000
               height=2000
               image = Image.open("hospital6.png")
               resize_image = image.resize((width, height))
               img = ImageTk.PhotoImage(resize_image)
               label1 = tk.Label(topEst,image=img)
               label1.image = img          #add extra stuff in screen
               label1.pack()
               st1=st.mean(temp1) #### case avg
               st2=st.mean(temp2)
               lb1=tk.Label(topEst,text="Average Covid case per month:",fg="yellow",
                        bg="black",font=("Times New Roman",18))
               lb1.place(x=5,y=100)
               lbl1=tk.Label(topEst,text=st1,fg="yellow",bg="black",font=("Times New
Roman",18))
               lbl1.place(x=5,y=200)
               lb2=tk.Label(topEst,text="Average Number of deaths due to covid per
month:",
                        fg="yellow",bg="black",font=("Times New Roman",18))
               lb2.place(x=5,y=300)
               lbl2=tk.Label(topEst,text=st2,fg="yellow",bg="black",font=("Times New
Roman",18))
               lbl2.place(x=5,y=300)

bt=tk.Button(topEst,text="Close",width=5,height=3,fg="green",bg="white",
                        font=("Times New Roman",18),command=topEst.destroy())
               bt.place(x=5,y=500)

button=tk.Button(topEnxt,text="next",width=5,height=1,bg="green",fg="yellow",
                        font=("Times New
Roman",20),command=lambda:[topEnxt.destroy(),stat()])
               button.place(x=1400,y=600)
         plt.style.use('seaborn')
         topE5=tk.Tk()
         topE5.geometry("2000x2000")
         topE5.title("graph")
         width=2000
```

```
height=2000
matplotlib.use('TkAgg')
f = Figure(figsize=(5,5), dpi=100)
a = f.add_subplot(111)
dates = [
    datetime(2020, 2, 1),
    datetime(2020, 3, 1),
    datetime(2020, 4, 1),
    datetime(2020, 5, 1),
    datetime(2020, 6, 1),
    datetime(2020, 7, 1),
    datetime(2020, 8, 1),
    datetime(2020, 9, 1),
    datetime(2020, 10, 1),
    datetime(2020, 11, 1),
    datetime(2020, 12, 1),
    datetime(2021, 1, 1),
    datetime(2021, 2, 1),
    datetime(2021, 3, 1),
    datetime(2021, 4, 1),
    datetime(2021, 5, 1),
    datetime(2021, 6, 1),
    datetime(2021, 7, 1),
    datetime(2021, 8, 1),
    datetime(2021, 9, 1),
    datetime(2021, 10, 1),
    datetime(2021, 11, 1),
    datetime(2021, 12, 1),
    datetime(2022, 1, 1),
    datetime(2022, 2, 1),
    datetime(2022, 3, 1),
    datetime(2022, 4, 1),
    datetime(2022, 5, 1),
    datetime(2022, 6, 1),
    datetime(2022, 7, 1),
    datetime(2022, 8, 1),
    datetime(2022, 9, 1),
    datetime(2022, 10, 1),
]

y = [3,20,600,2400,
     8800,20000,52000,78000,
     80000,39000,36000,16000,
     12000,15000,92000,400000,
     130000,45000,40000,30000,
     20000,10000,5000,100000,
```

```
            350000,75000,5000,2500,
            20000,2000,5000,2500,
            500
            ]
        temp1=y
        figure = Figure(figsize=(6, 4), dpi=100)
        figure_canvas = FigureCanvasTkAgg(figure, topE5)
        NavigationToolbar2Tk(figure_canvas, topE5)
        axes = figure.add_subplot()
        axes.plot(dates,y)
        axes.plot(dates, y,linestyle='solid')
        plt.gcf().autofmt_xdate()
        date_format=mpl_dates.DateFormatter('%b,%m,%Y')
        axes.set_title('Covid 19 daily case average per month in India')
        axes.set_ylabel('Cases')
        figure_canvas.get_tk_widget().pack(side=tk.TOP, fill=tk.BOTH, expand=1)

button=tk.Button(topE5,text="next",width=5,height=1,bg="green",fg="yellow",
                 font=("Times New
Roman",20),command=lambda:[topE5.destroy(),graphnxt()])
        button.place(x=1400,y=600)
    def faclt():
        fac=tk.Toplevel(topE)
        fac.geometry("2000x2000")
        fac.title("About us")
        width=2000
        height=2000
        image = Image.open("hospital6.png")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(fac,image=img)
        label1.image = img
        label1.pack()
        def next1():
            fac1=tk.Toplevel(fac)
            fac1.geometry("2000x2000")
            fac1.title("About us")
            width=2000
            height=2000
            image = Image.open("hospital4.jpg")
            resize_image = image.resize((width, height))
            img = ImageTk.PhotoImage(resize_image)
            label1 = tk.Label(fac1,image=img)
            label1.image = img
            label1.pack()
            def next2():
```

```
            fac2=tk.Toplevel(fac1)
            fac2.geometry("2000x2000")
            fac2.title("About us")
            width=2000
            height=2000
            image = Image.open("hospital18.jpg")
            resize_image = image.resize((width, height))
            img = ImageTk.PhotoImage(resize_image)
            label1 = tk.Label(fac2,image=img)
            label1.image = img
            label1.pack()
            b3=tk.Button(fac2,text="Back",width=4,height=4,bg="white",
                    fg="green",font=("Times New
Roman",20),command=fac2.destroy)
            b3.place(x=700,y=700)
          b2=tk.Button(fac1,text="Next",width=4,height=4,bg="white",
                  fg="green",font=("Times New Roman",20),command=next2)
          b2.place(x=700,y=700)
          b4=tk.Button(fac1,text="Back",width=4,height=4,bg="white",
                  fg="green",font=("Times New Roman",20),command=fac1.destroy)
          b4.place(x=400,y=700)
        b1=tk.Button(fac,text="Next",width=4,height=4,bg="white",
                fg="green",font=("Times New Roman",20),command=next1)
        b1.place(x=700,y=700)
        b4=tk.Button(fac,text="Back",width=4,height=4,bg="white",
                fg="green",font=("Times New Roman",20),command=fac.destroy)
        b4.place(x=400,y=700)
      def doc1():
        url="https://www.askapollo.com/physical-appointment"
        wb.open_new_tab(url)
      def fb():
        url="https://www.apollohospitals.com/apollo-hospitals-reviews/"
        wb.open_new_tab(url)
      def awards():
        url="https://www.apollohospitals.com/corporate/awards-
accolades/management/"
        wb.open_new_tab(url)
      topE=tk.Toplevel(topA)
      topE.geometry("2000x2000")
      topE.title("About us")
      width=2000
      height=2000
      image = Image.open("hospital6.png")     #add image
      resize_image = image.resize((width, height))
      img = ImageTk.PhotoImage(resize_image)
      label1 = tk.Label(topE,image=img)
```

```
        label1.image = img          #add extra stuff in screen
        label1.pack()
        b1=tk.Button(topE,text="Distinguished doctors",width=20,height=3,
                bg="white",fg="green",font=("Times New Roman",20),command=doc1)
        b1.place(x=200,y=100)
        b2=tk.Button(topE,text="Awards",width=20,height=3,bg="white",
                fg="green",font=("Times New Roman",20),command=awards)
        b2.place(x=600,y=100)
        b3=tk.Button(topE,text="Facilities",width=20,height=3,bg="white",
                fg="green",font=("Times New Roman",20),command=faclt)
        b3.place(x=200,y=500)
        b4=tk.Button(topE,text="People who trust
us",width=20,height=3,bg="white",fg="green",font=("Times New
Roman",20),command=fb)
        b4.place(x=600,y=500)
        b5=tk.Button(topE,text="Statistics",width=20,height=3,bg="white",
                fg="green",font=("Times New Roman",20),command=graph)
        b5.place(x=1000,y=500)
    b3=tk.Button(topA,text="About Us",width=10,height=2,bg="yellow",
            fg="red",font=("Times New Roman",18),command=open5)
    b3.place(x=800,y=400)
    def open6():
        topF=tk.Toplevel(topA)
        topF.geometry("2000x2000")
        topF.title("My details")
        width=2000
        height=2000
        image = Image.open("hospital7.jpg")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(topF,image=img)
        label1.image = img
        label1.pack()
        def histsub():
            global un
            mydb = sql.connect(host='localhost',
                database='avm',
                username='root',
                password='Vishvak03$'
                )
            cursor=mydb.cursor()
            hd=hist1.get()
            cd=hist2.get()
            alg=hist3.get()
            vc=hist4.get()
```

```
        ins="insert into pahistory (username,hd,cd,allergies,vaccine) values
(%s,%s,%s,%s,%s)"
        data=(un,hd,cd,alg,vc)
        cursor.execute(ins,data)
        mydb.commit()
        mydb.close()
      def history():
        hist=tk.Toplevel(topF)
        hist.geometry("2000x2000")
        hist.title("My details")
        width=2000
        height=2000
        image = Image.open("hospital7.jpg")
        resize_image = image.resize((width, height))
        img = ImageTk.PhotoImage(resize_image)
        label1 = tk.Label(hist,image=img)
        label1.image = img
        label1.pack()
        lbl=tk.Label(hist,text="Enter the following details:",fg="purple",
                bg="yellow",font=("Times New Roman",32))
        lbl.place(x=5, y=20)
        lbl1=tk.Label(hist,
                  text="If you have any hereditary diesease\nplease enter:",
                  fg="blue",font=("Times New Roman",32))
        lbl1.place(x=5,y=150)
        txtfld1=tk.Entry(hist,bd=5,width=50,textvariable = hist1,font=("Times New
Roman",24))
        txtfld1.place(x=650,y=150)
        lbl2=tk.Label(hist,text="If you have any chronic disease\nplease enter:",
                  fg="blue",font=("Times New Roman",32))
        lbl2.place(x=5,y=280)
        txtfld2=tk.Entry(hist,bd=5,width=50,textvariable = hist2,font=("Times New
Roman",24))
        txtfld2.place(x=650,y=280)
        lbl3=tk.Label(hist,text="If you have any allergies\nplease Enter:",
                  fg="blue",font=("Times New Roman",32))
        lbl3.place(x=5,y=410)
        txtfld3=tk.Entry(hist,bd=5,width=50,textvariable = hist3,font=("Times New
Roman",24))
        txtfld3.place(x=650,y=410)
        lbl4=tk.Label(hist,text="Are you vaccinated for Covid 19?:",
                  fg="blue",font=("Times New Roman",32))
        lbl4.place(x=5,y=540)
        txtfld4=tk.Entry(hist,bd=5,width=50,textvariable = hist4,font=("Times New
Roman",24))
        txtfld4.place(x=650,y=540)
```

```
        but=tk.Button(hist,
                      text="submit",width=10,height=4,bg="blue",
                      fg="yellow",font=("Times New Roman",32),
                      command=lambda:[histsub(),hist.destroy()])
        but.place(x=750,y=670)
    b1=tk.Button(topF,text="My History",width=20,height=4,bg="blue",
                 fg="yellow",font=("Times New Roman",20),command=history)
    b1.place(x=200,y=100)
    b2=tk.Button(topF,text="Return to Homepage",width=20,height=4,bg="blue",
                 fg="yellow",font=("Times New Roman",20),command=topF.destroy)
    b2.place(x=200,y=600)
  b4=tk.Button(topA,text="My Details",width=10,height=2,bg="yellow",fg="red",
               font=("Times New Roman",18),command=open6)
  b4.place(x=400,y=400)
  bclose=tk.Button(topA,text="Back",width=10,height=2,bg="yellow",fg="red",
                   font=("Times New Roman",18),command=topA.destroy)
  bclose.place(x=400,y=200)
  topA.mainloop()
def submit2(n):
  global top
  global det
  cond=txtfld4.get()
  c=n.get()
  mydb = sql.connect(host='localhost',
                     database='avm',
                     username='root',
                     password='Vishvak03$'
                     )
  cursor=mydb.cursor()
  cursor.execute("select * from client;")
  data=cursor.fetchall()
  li=data[0]
  cid=0
  while True:
    cid=random.randint(0,1000)
    if cid in li:
      continue
    else:
      break
  det.append(cid)
  det.append(c)
  det.append(cond)
  mydb.close()
  txtfld4.set("")
def redirect():
  global window
```

```
    screen=tk.Toplevel(window)
    screen.geometry("2000x2000")
    width=2000
    height=2000
    screen.title("Redirect page")
    image = Image.open("hospital.png")
    resize_image = image.resize((width, height))
    img = ImageTk.PhotoImage(resize_image)
    label1 = tk.Label(screen,image=img)
    label1.image = img
    label1.pack()
    label2=tk.Label(screen,
                    text="To browse the facilities of the application, click BROWSE below\n
To book appointments, close the applicaion and SIGN IN:",
                    fg="yellow",bg="black",font=("Times New Roman",18))
    label2.place(x=200,y=300)
    bt=tk.Button(screen,text="CLOSE",width=10,height=5,fg="yellow",bg="black",
                 font=("Times New Roman",18),command=window.destroy)
    bt.place(x=500,y=500)
    bt1=tk.Button(screen,
text="BROWSE",width=10,height=5,fg="yellow",bg="black",
                  font=("Times New Roman",18),command=open1a)
    bt1.place(x=700,y=500)
def open1b():
    global un
    global top
    un=txtfld2a.get()
    topB=tk.Toplevel(window)
    topB.geometry("2000x2000")
    topB.title("Sign up: page 2")
    width=2000
    height=2000
    image = Image.open("hospital.png")
    resize_image = image.resize((width, height))
    img = ImageTk.PhotoImage(resize_image)
    label1 = tk.Label(topB,image=img)
    label1.image = img
    label1.pack()
    lbl1=tk.Label(topB,text="Enter medical details:",fg="purple",
                  bg="yellow",font=("Times New Roman",32))
    lbl1.place(x=5, y=20)
    lbl2=tk.Label(topB,text="Gender:",fg="blue",font=("Times New Roman",32))
    lbl2.place(x=5,y=100)
    def sel():
        global det
        s=var1.get()
```

```
        selection = "You selected the option " + s
        s=s[0]
        label.config(text = selection)
        det.append(s)
    var1 = tk.StringVar()
    R1 = tk.Radiobutton(topB, text="Male",fg="blue",font=("Times New Roman",24),
                        variable=var1, value="Male",command=sel)
    R1.place(x=340,y=100)
    R2 = tk.Radiobutton(topB, text="Female",fg="blue",font=("Times New
Roman",24),
                        variable=var1, value="Female",command=sel)
    R2.place(x=600,y=100)
    label = tk.Label(topB,fg="purple",font=("Times New Roman",18))
    label.place(x=340,y=180)
    lbl3=tk.Label(topB,text="Blood Group:",fg="blue",font=("Times New
Roman",32))
    lbl3.place(x=5,y=260)
    n = tk.StringVar()
    bldg = ttk.Combobox(topB, width = 27, textvariable = n)
    bldg['values'] = ('A+','O+','B+','AB+','A-','O-','B-','AB-')
    bldg.place(x=340,y=280)
    lbl4=tk.Label(topB,text="Enter specific \nmedical condition \n(if any):",
                  fg="blue",font=("Times New Roman",32))
    lbl4.place(x=5,y=360)
    txtfld1=tk.Entry(topB,bd=5,width=50,textvariable = txtfld4,
                     font=("Times New Roman",24))
    txtfld1.place(x=340,y=400)
    bt1=tk.Button(topB,
                  text="Confirm",width=10,height=2,fg="black",
                  font=("Times New Roman",14),command=lambda:[redirect(),submit2(n)])
    bt1.place(x=400,y=660)
    bt2=tk.Button(topB,text="Back",width=10,height=2,
                  fg="black",font=("Times New Roman",14),command=topB.destroy)
    bt2.place(x=800,y=660)
    topB.mainloop()
def pwinc():
    global top
    messagebox.showerror("password incorrect!","Password incorrect! Try again!")
    top.destroy()
def usernotfound():
    global top
    messagebox.askretrycancel("not found","Username not found. Please go SIGN
UP")
    top.destroy()
def submit():
    mydb = sql.connect(host='localhost',
```

```
                database='avm',
                username='root',
                password='Vishvak03$'
                )
    global un
    cursor=mydb.cursor()
    name=txtfl2.get()
    password=txtfl3.get()
    cursor.execute("select * from client;")
    data=cursor.fetchall()
    for i in data:
        if name == i[2]:
            print("Username found")
            if password == i[3]:
                print("logged in successfully")
                un=name
                open1a()
            else:
                print("password incorrect")
                pwinc()
            break
        elif name != i[2]:
            continue
    else:
        print("Username not registered")
        usernotfound()
    mydb.close()
    txtfl2.set("")
    txtfl3.set("")
def open1():#login
    global top
    top=tk.Toplevel(window)
    top.geometry("2000x2000")
    top.title("Sign in")
    width=2000
    height=2000
    image = Image.open("hospital.png")
    resize_image = image.resize((width, height))
    img = ImageTk.PhotoImage(resize_image)
    label1 = tk.Label(top,image=img)
    label1.image = img
    label1.pack()
    lbl1=tk.Label(top,text="Enter credentials:",fg="purple",
                  bg="yellow",font=("Times New Roman",32))
    lbl1.place(x=5, y=20)
    lbl2=tk.Label(top,text="Enter Username:",fg="blue",
```

```
            font=("Times New Roman",32))
    lbl2.place(x=5,y=100)
    txtfld2=tk.Entry(top,textvariable = txtfl2,bd=5,width=50,
                font=("Times New Roman",24))
    txtfld2.place(x=340,y=100)
    lbl3=tk.Label(top,text="Enter Password:",fg="blue",
            font=("Times New Roman",32))
    lbl3.place(x=5,y=180)
    txtfld3=tk.Entry(top,textvariable = txtfl3,bd=5,width=50,
                show="*",font=("Times New Roman",24))
    txtfld3.place(x=340,y=180)
    bt1=tk.Button(top,text="Confirm",width=10,height=2,fg="black",
            font=("Times New Roman",14),command=submit)
    bt1.place(x=340,y=260)
    bt2=tk.Button(top,text="Back",width=10,height=2,fg="black",
            font=("Times New Roman",14),command=top.destroy)
    bt2.place(x=800,y=260)
    top.mainloop()
def submit1(m):
    global det
    email=txtfld1a.get()
    username=txtfld2a.get()
    password=txtfld3a.get()
    mydb = sql.connect(host='localhost',
                database='avm',
                username='root',
                password='Vishvak03$'
                )
    cursor=mydb.cursor()
    fname=txtfld4a.get()
    mob=txtfld5a.get()
    city=m.get()
    det.append(email)
    det.append(username)
    det.append(password)
    det.append(fname)
    det.append(mob)
    det.append(city)
    print(det)
    ins="insert into
client(cust_id,email_id,username,paswrd,dob,fullname,mob,city,gender,bloodgrp,spec
ial) values (%s,%s,%s,%s,%s,%s,%s,%s,%s,%s,%s)"
    data=(det[2],det[5],det[6],det[7],det[0],
        det[8],det[9],det[10],det[1],
        det[3],det[4])
    cursor.execute(ins,data)
```

```
    mydb.commit()
    mydb.close()
    txtfld1a.set("")
    txtfld2a.set("")
    txtfld3a.set("")
    txtfld4a.set("")
    txtfld5a.set(0)
def my_upd(cal,l1):
    global  text
    global det
    text=cal.get_date()
    l1.config(text=cal.get_date())
    det.append(text)
def open2():
    top1=tk.Toplevel(window)
    top1.geometry("2000x2000")
    top1.title("Sign up")
    width=2000
    height=2000
    image = Image.open("hospital.png")
    resize_image = image.resize((width, height))
    img = ImageTk.PhotoImage(resize_image)
    label1 = tk.Label(top1,image=img)
    label1.image = img
    label1.pack()
    lbl=tk.Label(top1,text="To create an account, enter the following details:",
                 fg="purple",bg="yellow",font=("Times New Roman",32))
    lbl.place(x=5, y=20)
    lbl1=tk.Label(top1,text="Enter Email id:",fg="blue",
                  font=("Times New Roman",32))
    lbl1.place(x=5,y=100)
    txtfld1=tk.Entry(top1,bd=5,width=50,textvariable = txtfld1a,
                     font=("Times New Roman",24))
    txtfld1.place(x=340,y=100)
    lbl2=tk.Label(top1,text="Enter Username:",fg="blue",
                  font=("Times New Roman",32))
    lbl2.place(x=5,y=180)
    txtfld2=tk.Entry(top1,bd=5,width=50,textvariable = txtfld2a,
                     font=("Times New Roman",24))
    txtfld2.place(x=340,y=180)
    lbl3=tk.Label(top1,text="Enter Password:",fg="blue",
                  font=("Times New Roman",32))
    lbl3.place(x=5,y=260)
    txtfld3=tk.Entry(top1,bd=5,width=50,show="*",textvariable = txtfld3a,
                     font=("Times New Roman",24))
    txtfld3.place(x=340,y=260)
```

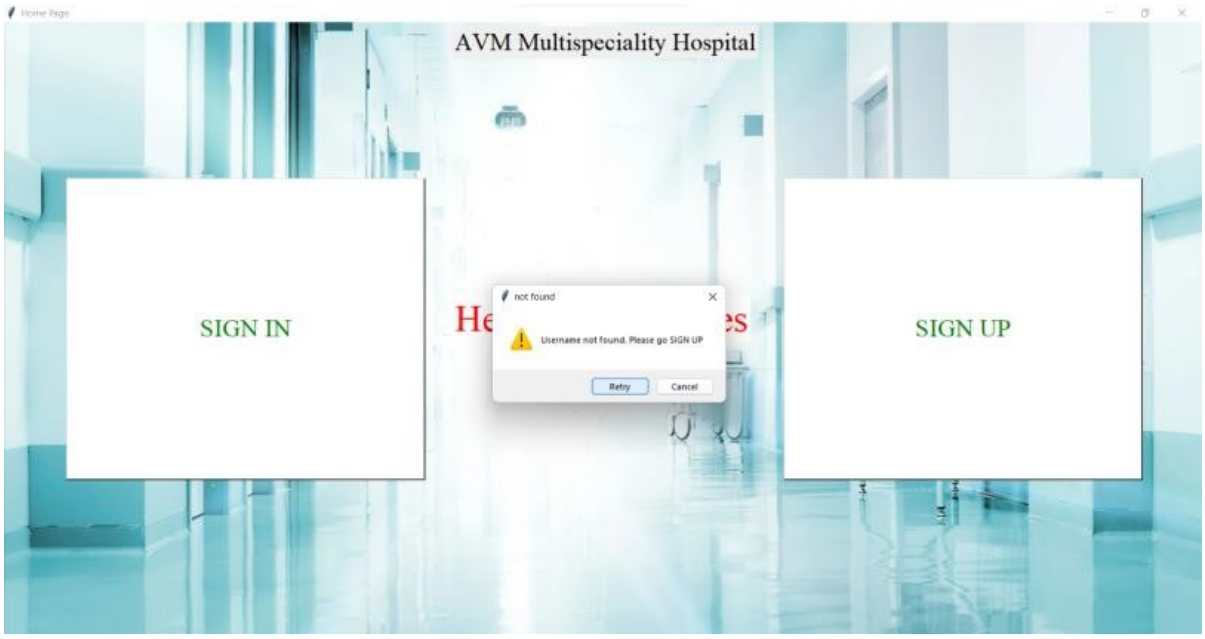
```
    lbl4=tk.Label(top1,text="Enter Date of Birth:",fg="blue",
                font=("Times New Roman",32))
    lbl4.place(x=5,y=340)
    cal=cale.DateEntry(top1,fg="red",bg="yellow")
    cal.place(x=400,y=360)
    l1=tk.Label(top1,text='data',bg='yellow')
    l1.place(x=800,y=360)
    b0=tk.Button(top1,text='Read', command=lambda:my_upd(cal,l1))
    b0.place(x=600,y=360)
    lbl5=tk.Label(top1,text="Enter Full Name:",fg="blue",
                font=("Times New Roman",32))
    lbl5.place(x=5,y=420)
    txtfld5=tk.Entry(top1,bd=5,width=50,textvariable = txtfld4a,
                  font=("Times New Roman",24))
    txtfld5.place(x=340,y=420)
    lbl6=tk.Label(top1,text="Enter mobile no:",fg="blue",
                font=("Times New Roman",32))
    lbl6.place(x=5,y=500)
    txtfld6=tk.Entry(top1,bd=5,width=50,textvariable = txtfld5a,
                  font=("Times New Roman",24))
    txtfld6.place(x=340,y=500)
    lbl7=tk.Label(top1,text="Enter city:",fg="blue",
                font=("Times New Roman",32))
    lbl7.place(x=5,y=580)
    m = tk.StringVar()
    city= ttk.Combobox(top1, width = 27, textvariable = m)
    city['values'] = ('Chennai','Mumbai','Delhi',
                   'Bangalore','Kolkata','Hyderabad',
                   'Ahmedabad','Kochin','Pune','Lucknow')
    city.current()
    city.place(x=340,y=580)
    bt1=tk.Button(top1,text="Next",width=10,height=2,fg="black",
                font=("Times New Roman",14),
                command=lambda:[open1b(),submit1(m)])
    bt1.place(x=340,y=660)
    bt2=tk.Button(top1,text="Back",width=10,height=2,fg="black",
                font=("Times New Roman",14),command=top1.destroy)
    bt2.place(x=800,y=660)
    top1.mainloop()
button=tk.Button(window,text="SIGN IN",width= 25,height=10,
               fg="green",bg="white",font=("Times New Roman",24),
               command=open1)
button.place(x=80,y=200)
bt=tk.Button(window,text="SIGN UP",width= 25,height=10,
            fg="green",bg="white",font=("Times New Roman",24),
            command=open2)
```

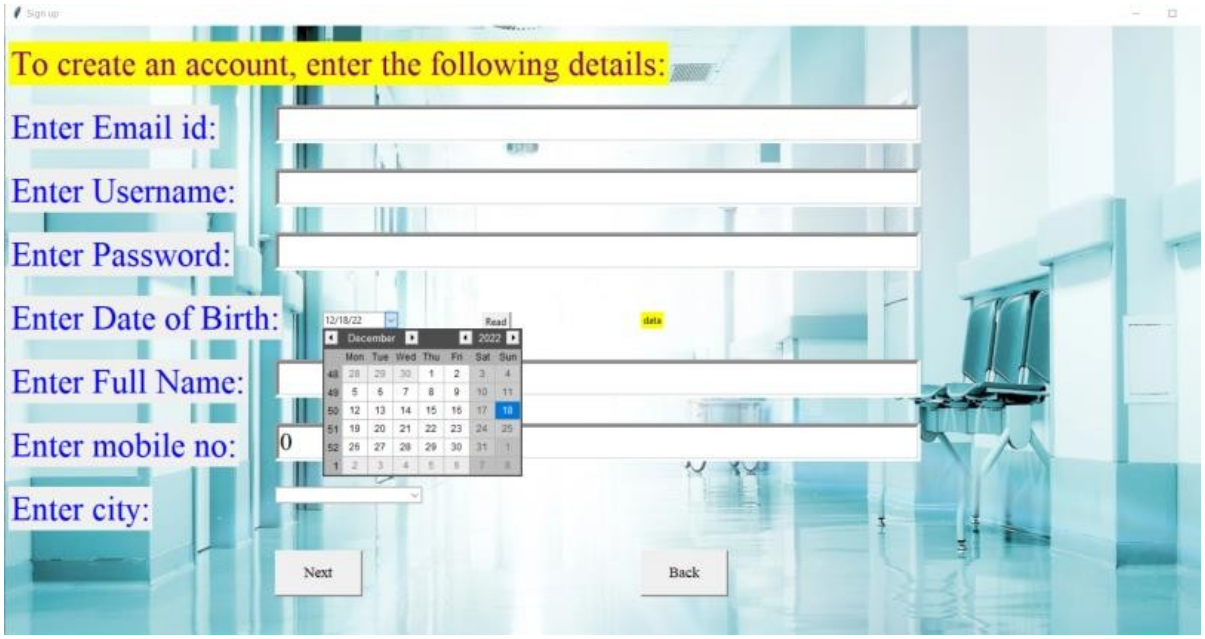
```
bt.place(x=1000,y=200)
window.mainloop()
```

OUTPUT


Home Page
AVM Multispeciality Hospital
SIGN IN
Healthcare Services
SIGN UP


Sign in
Enter credentials:
Enter Username:
Enter Password:
Confirm
Back

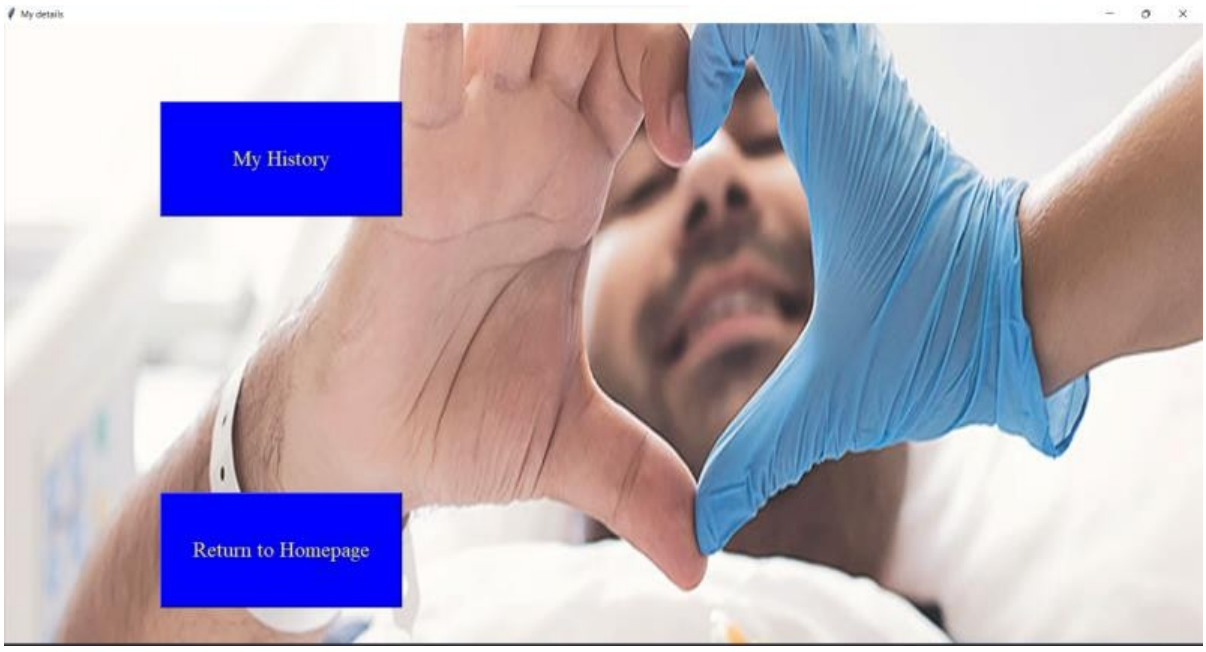

Home Page
AVM Multispeciality Hospital
SIGN IN
not found
Username not found. Please go SIGN UP
Retry
Cancel
SIGN UP


Sign up
To create an account, enter the following details:
Enter Email id:
Enter Username:
Enter Password:
Enter Date of Birth:
Enter Full Name:
Enter mobile no:
Enter city:
12/18/22
Read
data
December
2022
Next
Back

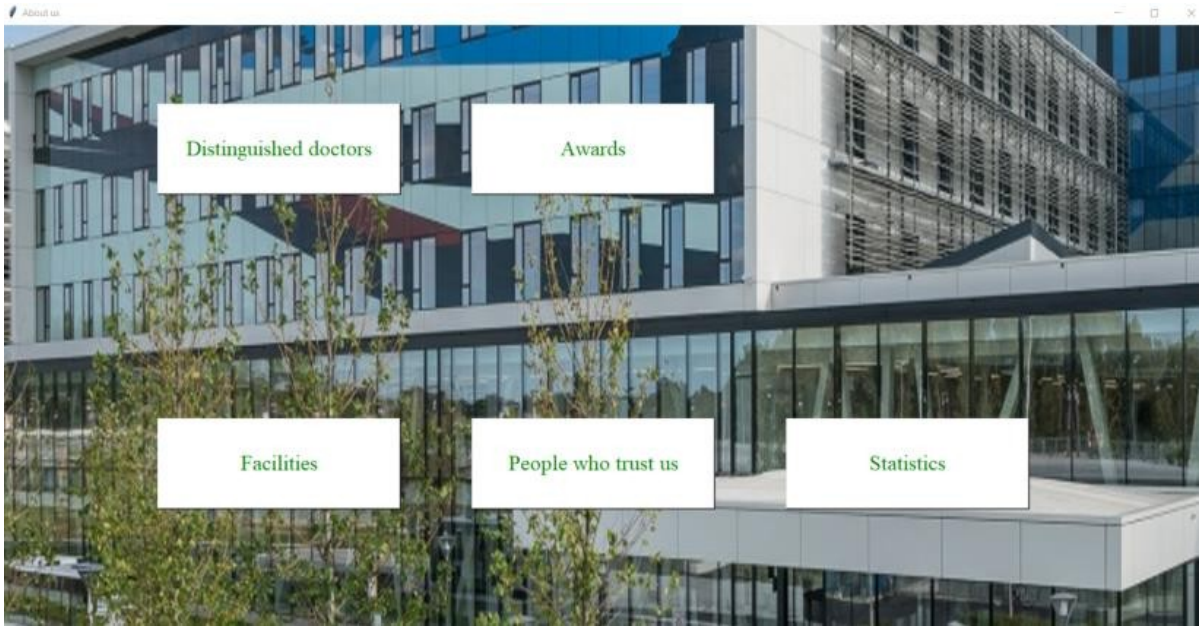

Sign up: page 2
Enter medical details:
Gender:
Male
Female
You selected the option Male
Blood Group:
Enter specific medical condition (if any):
Confirm
Back

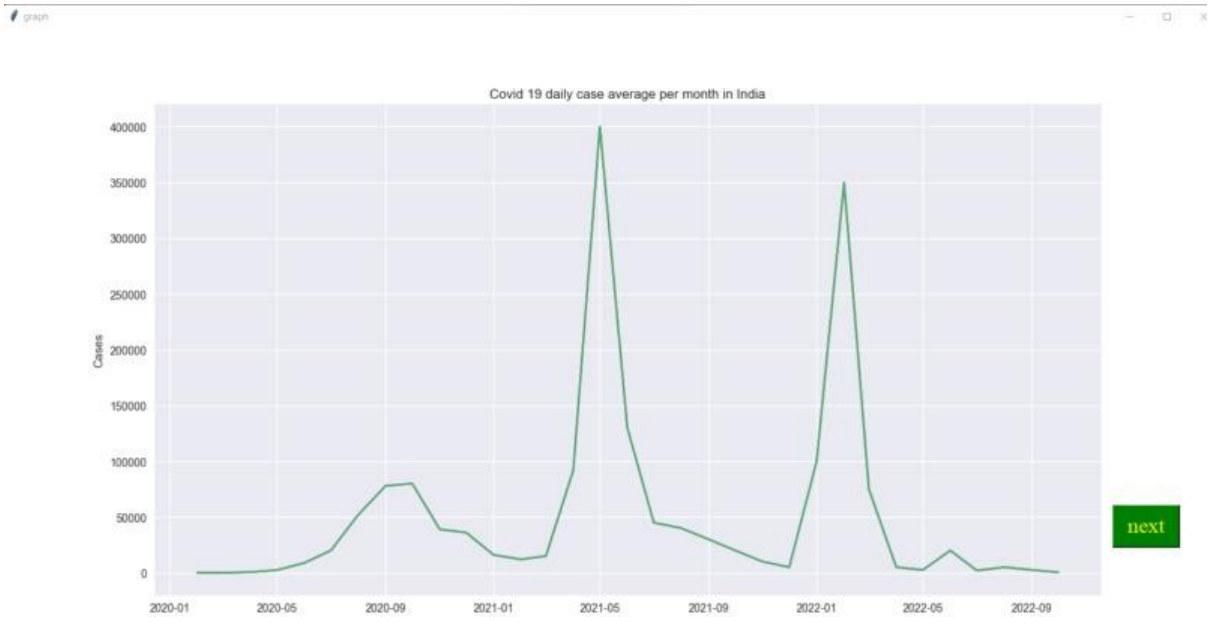

Home Page
AVM Multispeciality Hospital
SIGN IN
Welcome!
Hello Gemdihalide
OK
SIGN UP

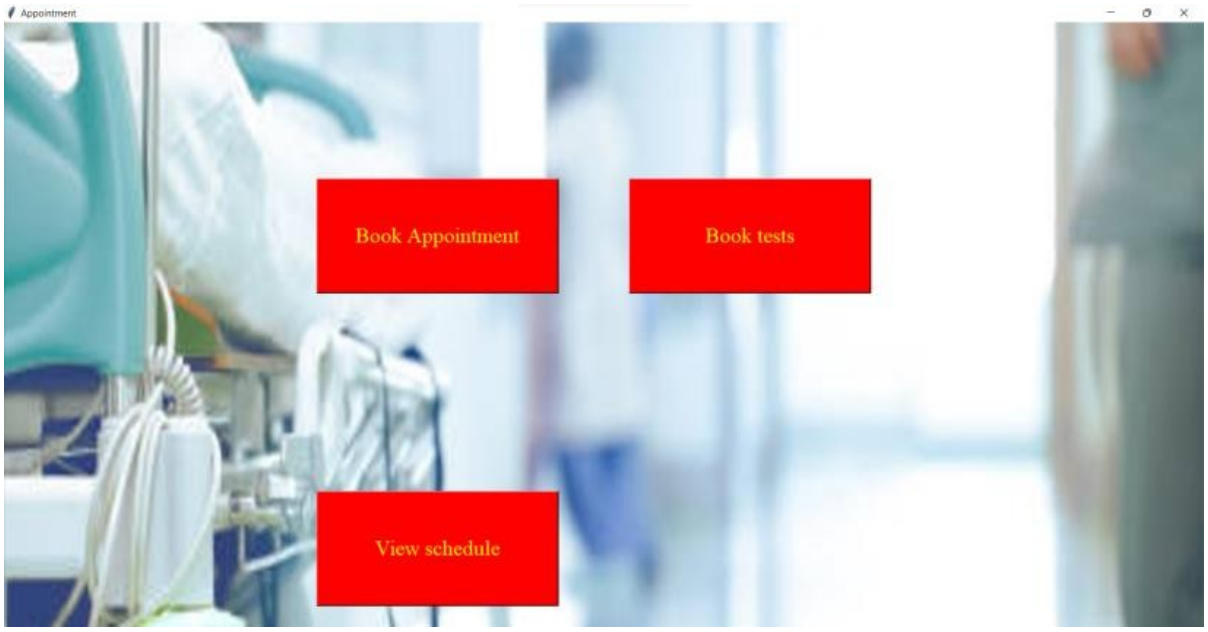

Welcome Back
Back
My Details
About Us
Appointments
Self Check

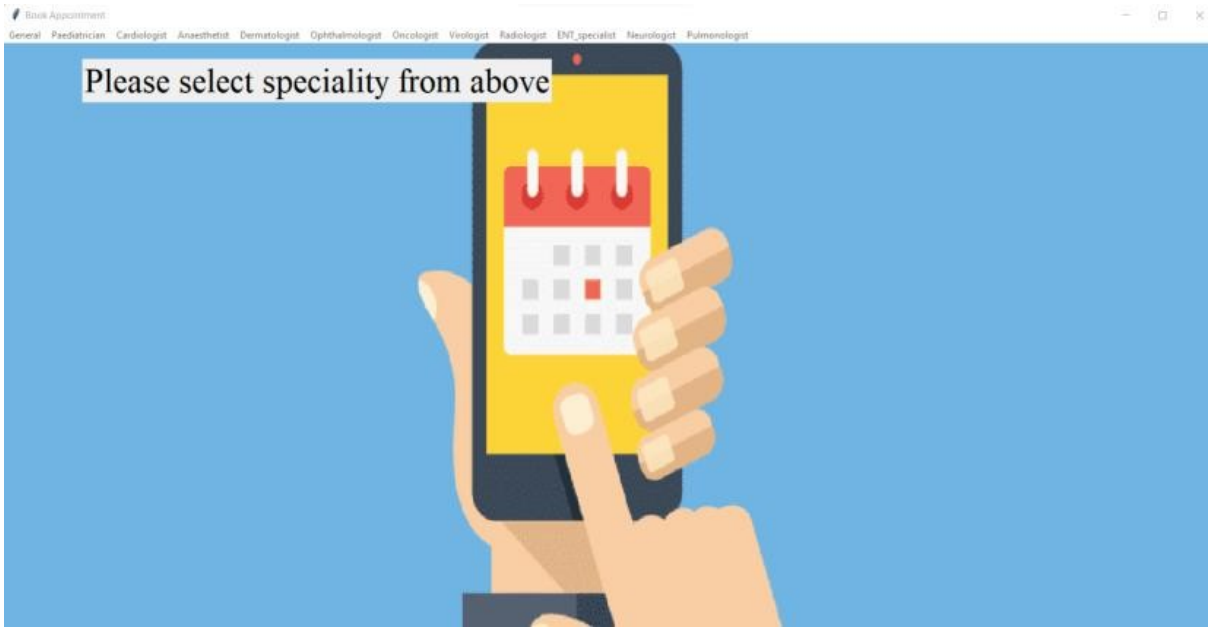

My details
My History
Return to Homepage

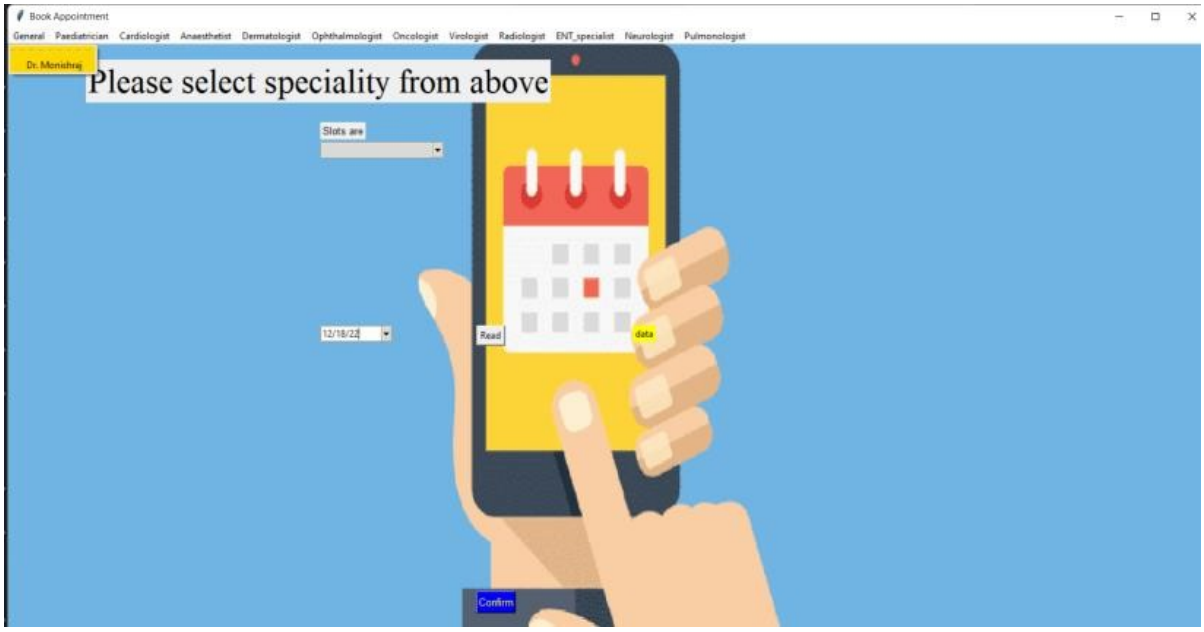

My details
Enter the following details:
If you have any hereditary diesease please enter:
If you have any chronic disease please enter:
If you have any allergies please Enter:
Are you vaccinated for Covid 19?:
submit

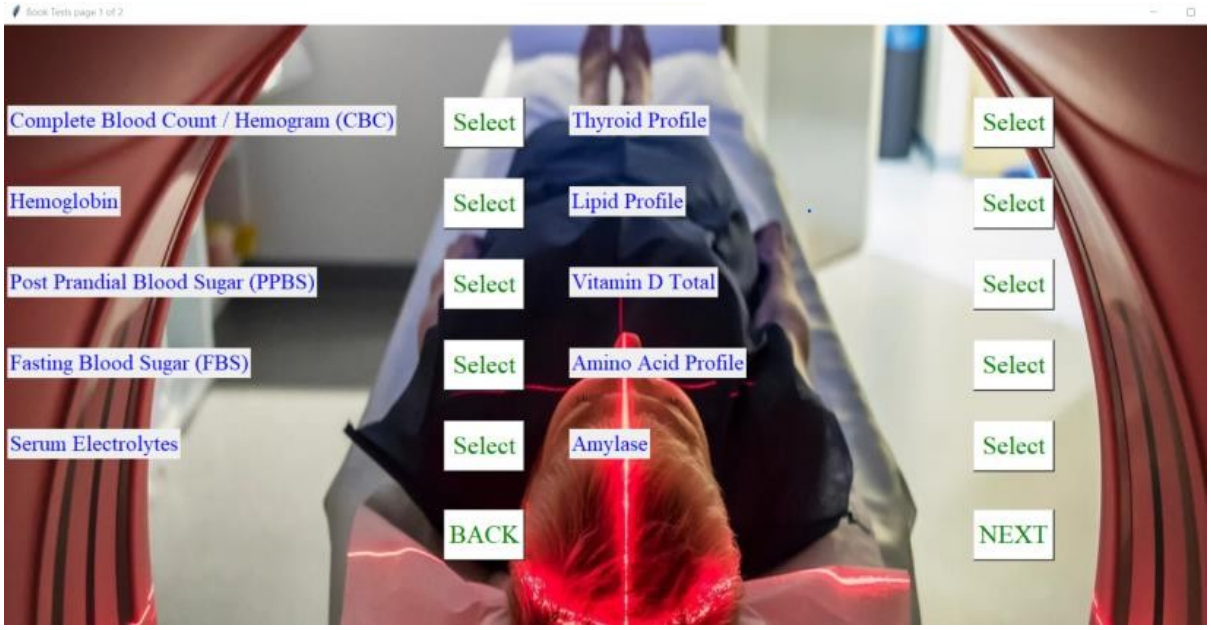

About us
Distinguished doctors
Awards
Facilities
People who trust us
Statistics

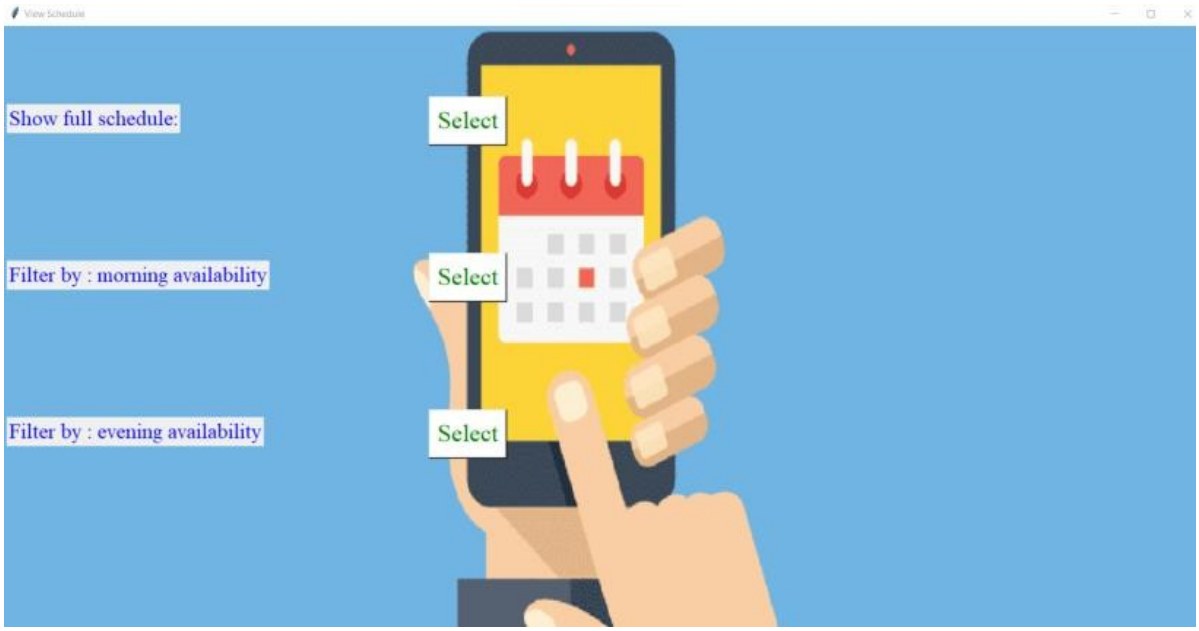

graph
Covid 19 daily case average per month in India
Cases
400000
350000
300000
250000
200000
150000
100000
50000
0
2020-01
2020-05
2020-09
2021-01
2021-05
2021-09
2022-01
2022-05
2022-09
next


Appointment
Book Appointment
Book tests
View schedule


Book Appointment
General Paediatrician Cardiologist Anaesthetist Dermatologist Ophthalmologist Oncologist Virologist Radiologist ENT_specialist Neurologist Pulmonologist
Please select speciality from above

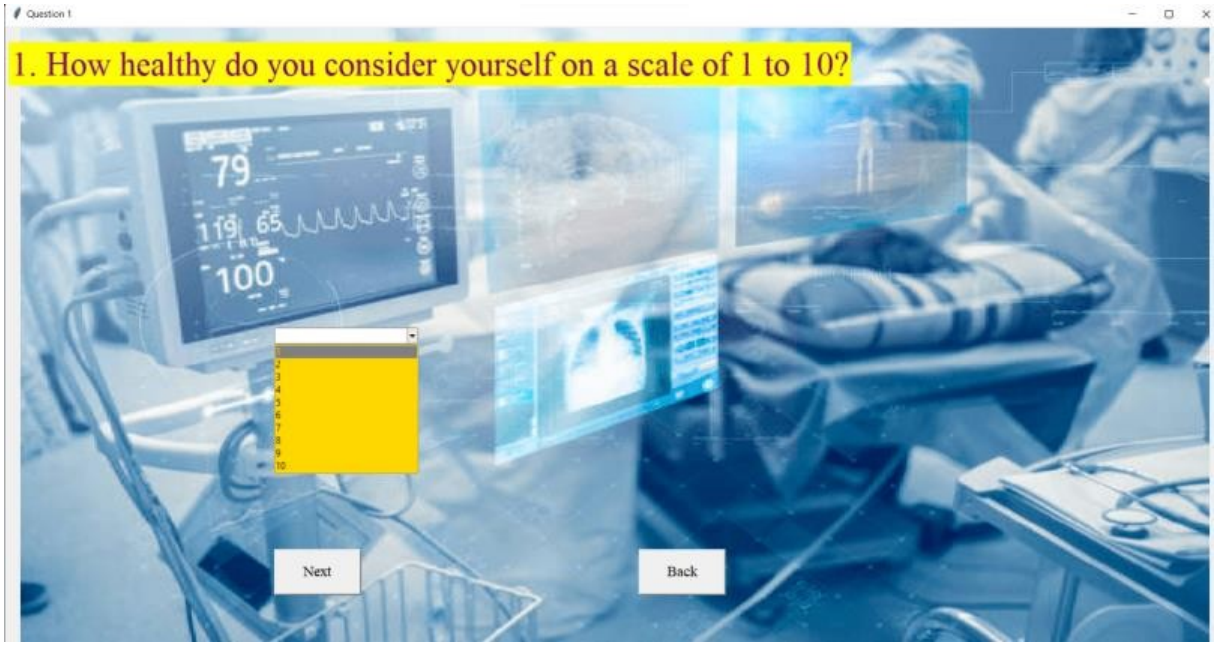

Book Appointment
General Paediatrician Cardiologist Anaesthetist Dermatologist Ophthalmologist Oncologist Virologist Radiologist ENT_specialist Neurologist Pulmonologist
Dr. Manishraj
Please select speciality from above
Slots are
12/18/22
Read
data
Confirm


Book Tests page 1 of 2
Complete Blood Count / Hemogram (CBC)
Select
Thyroid Profile
Select
Hemoglobin
Select
Lipid Profile
Select
Post Prandial Blood Sugar (PPBS)
Select
Vitamin D Total
Select
Fasting Blood Sugar (FBS)
Select
Amino Acid Profile
Select
Serum Electrolytes
Select
Amylase
Select
BACK
NEXT

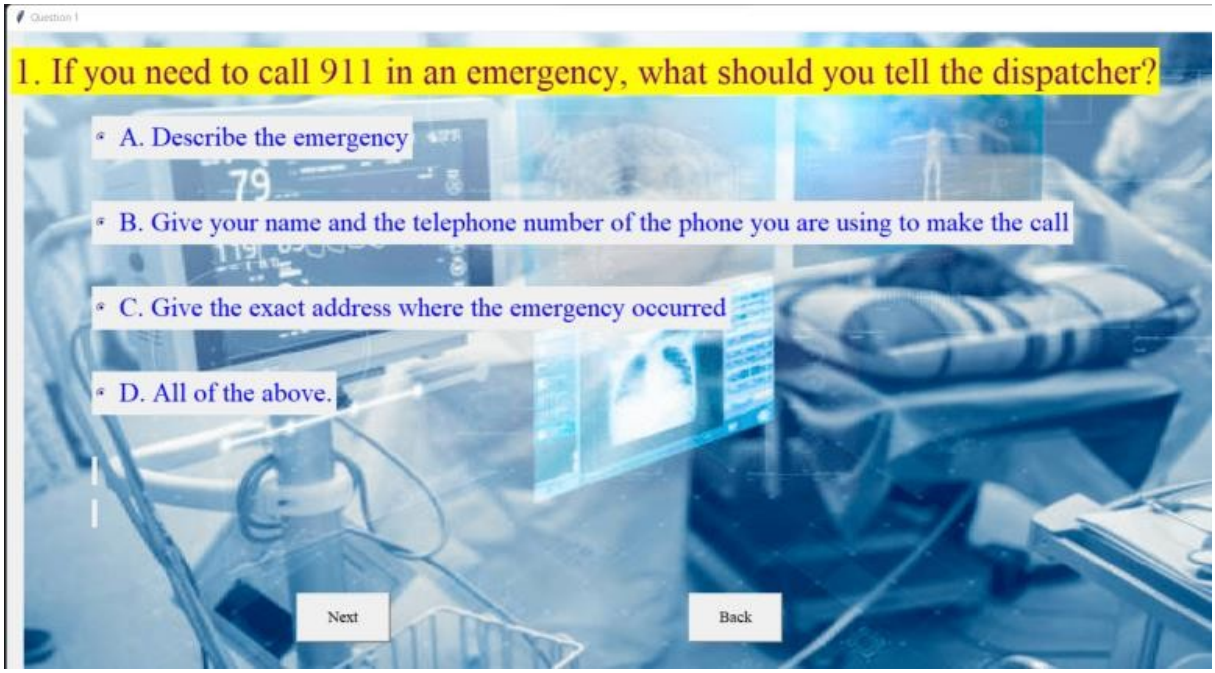

View Schedule
Show full schedule:
Select
Filter by : morning availability
Select
Filter by : evening availability
Select

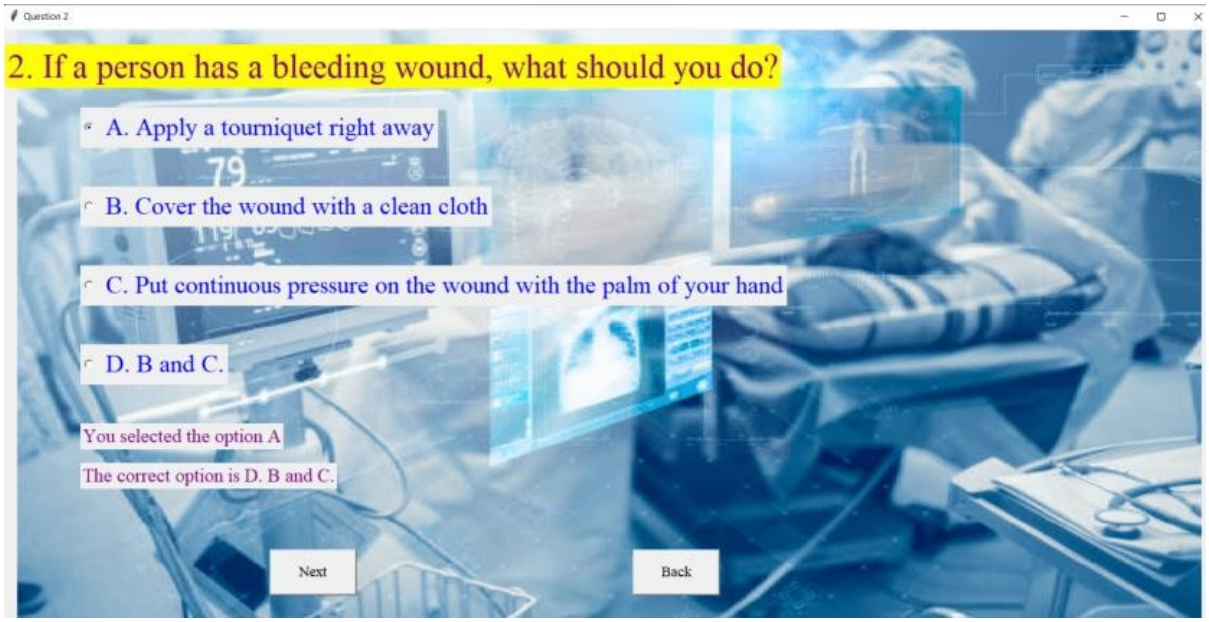

View full Schedule
Chief_Doctors Speciality From To
0 Dr. Monishraj General 09:00:00 12:00:00
1 Dr. Maren Paediatrician 08:00:00 10:00:00
2 Dr. Pranav ENT specialist 09:30:00 12:30:00
3 Dr. Varsha Ophthalmologist 10:00:00 13:00:00
4 Dr. Jaideep Dermatologist 18:30:00 21:00:00
5 Dr. Vignesh Anaesthetist 17:00:00 19:00:00
6 Dr. Harini Oncologist 15:30:00 18:00:00
7 Dr. Chirag Virologist 19:30:00 22:00:00
8 Dr. Shreya Radiologist 17:30:00 19:30:00
9 Dr. Manavh Cardiologist 18:00:00 20:00:00
10 Dr. Sidhanth Neurologist 18:30:00 21:30:00
11 Dr. Darshan Pulmonologist 19:00:00 22:00:00


Self Check
To assess your condition, click the button below:
Start
To take up a quiz on safety precautions, click the button below:
Start
return to
home page


Question 1
1. How healthy do you consider yourself on a scale of 1 to 10?
Next
Back


Self Test - End
Results based on the answers to the previous 10 questions:
Unhealthy
Mentally Healthy
Continue Exercising Regularly, keep up the good physical work :)
Return to homepage


Question 1
1. If you need to call 911 in an emergency, what should you tell the dispatcher?
A. Describe the emergency
B. Give your name and the telephone number of the phone you are using to make the call
C. Give the exact address where the emergency occurred
D. All of the above.
Next
Back


Question 2
2. If a person has a bleeding wound, what should you do?
A. Apply a tourniquet right away
B. Cover the wound with a clean cloth
C. Put continuous pressure on the wound with the palm of your hand
D. B and C.
You selected the option A
The correct option is D. B and C.
Next
Back

CONCLUSION

In conclusion, the computer science hospital management system is an essential tool for streamlining the operations of any medical institution. It automates many of the processes involved in managing patient records, appointments, and self-evaluation. By providing a secure and efficient system, it enables hospitals to deliver higher quality care and improved patient satisfaction. The system also offers cost savings, as it eliminates the need for manual paperwork and data entry. Ultimately, this system is a valuable asset for any medical institution.