COMPUTER SCIENCE

PROJECT FILE

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XII-A

Roll No. –

Session: 2020-2021

Yuvashakti Model School Sector-3, Rohini, Delhi-85

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CERTIFICATE

This is to certify that HARSH VISHWKARMA student of Class XII A , Yuvashakti Model School has completed solely and satisfactorily regarding the project titled **'Sudo Tech Incorporations'** during the academic year 2020-2021 towards fulfillment of credit for the Computer Science practical conducted by CBSE under my supervision.

Ms. Swati Narang

Department of Computer Science

ACKNOWLEDGEMENT

We would like to express our sincere gratitude to my computer science mentor Ms. Swati Narang, for her vital support, guidance and encouragement - without which this project would not have come forth. Her unflagging patience, creativity and immense knowledge that she shared with us have proved highly beneficial to us and have made our Project File both possible and successful.

HARSH VISHWAKARMA

XII-A

MODULES USED

➢ *easygui==0.98.1*

Easygui module is a module used for Graphical User Interface (GUI) related tasks. Its **fileopenbox()** method is used for taking input of files from the user .

➢ *mysql-connector-python==8.0.22*

This module is used for connecting mysql-database to our python program for insertion, deletion,updation,searching and modifcation related tasks. Its **fetchone(),fetchall(),execute()** methods have been used . Connection object and cusor object OF THIS MODULE had also been used in this project. This module is basically **for interacting with our mysql datatbase** through python.

➢ *prettytable==1.0.1*

This module is used for displaying the data fetched from our mysql database through our python script for making this project more user-friendly and simple for end user to understand. This moduledisplays the fetched data in the form of table as displayed in mysql command-line-client.

➢ *pyfiglet==0. 8.post1*

This module is used for printing terminal art (designing on terminal) or ASCII art onto terminal/cmd prompt .Its figlet_format() method has been used for converting text to ASCII art .

➢ *PyPDF2==1.26.0*

This module has been used for handling **PDF** files in this project and perform some operations like extracting text using **extractText()** method from **PDF** file , getting number of pages in pdf file using **numPage** method , selecting a particular page in pdf using **getPage()** method and performing above operations and some other methods imported from this module has been used.

➢ *termcolor==1.1.0*

This module is used for designing menu options like changing the font color and filling colors onto the terminal through **colored(),cprint()** methods of this module.

- *tqdm==4.54.1*

  This module is used for **loading interface** onto the terminal. It is cross platform and supereasy to use.Its **trange()** method has been used in this project to make **progress bar** while program is launching.

- *plyer*

This module is used for sending **push notifications** in this project by using its notify() method . It is cross-platform which means you can use it on linux,windows,macos.

- *requests*

  This module is used for making get requests to website through the python program only by using its **get()** method.

- json

  This module is used to convert the fetched data from website into json format using **json()** method **. JSON (JavaScriptObjectNotation)** format is widely used for information exchange also it is both **machine and human-readable.**

- *Beepy*

  This module is used for push notification sound .It plays audio after every push notification.

- *pyttsx3==2.7*

  This module is basically **a TTS(Text-to-Speech)** converter module . It allows us to read the text with the help of ***Windows OS inbuilt voice*** and using windows inbuilt voice **API *,SAPI (SPEECH APPLICATION PROGRAMMING INTERFACE).***

- *colorama==0.4.1*

Colorama is a module used for printing colors to windows command prompt/powershell as cmd/powershell doesn't officially support **ANSI escape sequence**. To print colors to windows terminal **init() method** from this moule is used in this project

Brief Overview of Project

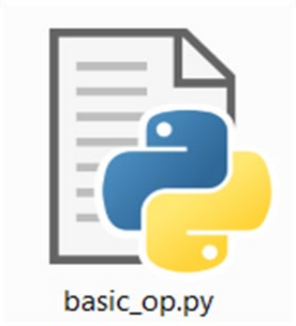
This project is aimed at solving real world problems and providing end user a quality service from our company . This project consists of a employee management system , a file reader and a real time corona virus notification system .

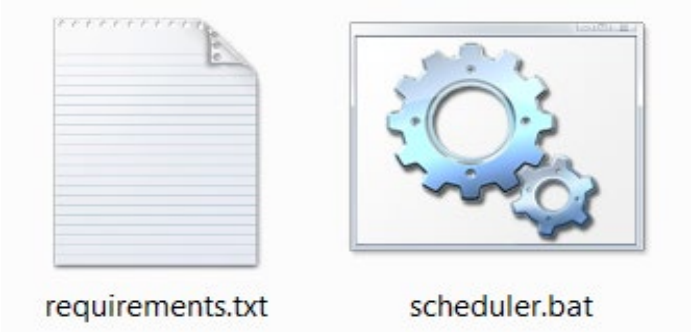
- **Employee Management System:** This system can be used for **management** of employee details in business and organizations. Employee details such as name,employeeID, salary,designation etc. can be added , modified , deleted and displayed. One can also search details of any particular Employee . There is also a feature using which we can **send e-mails** to any of the employees.
  It makes managing details of Employee very **convenient** for business.Features like **push notifications** and **notification sound** is also added.

- **File Reader:** This application can be used for reading texts from any *pdf/text* files. The **system generated voice (computer-voice)** is used to read in this program to read the content from the files This application is also beneficial for the *visually-impaired people*. The **number of pages** in **PDF** file can also be seen during the running of application.

- **Covid-Notification-System:** This system can be used for getting regular updates regarding the **coronavirus pandemic** in India . Real time data will be displayed through the **push notifications** with a short-term buzzing sound . One can also ***schedule notification*** for every 15 minutes to be displayed on their system.

Structure of my project





CODING

SOURCE CODE

CODING (cs_project.py)

```
import os
from termcolor import colored,cprint
from colorama import init
import pyfiglet
from basic_op import addrec,delrec,searchrec,disprec,mailfun
from modfun import modrec
from tqdm import tqdm,trange
from time import sleep
from filereader import freader
from prettytable import PrettyTable
from covidinfo import coronainfo
from plyer import notification as nt # Notification system
from beepy import beep #Notification sound

x=PrettyTable()
init() #WINDOWS PLATFORM FOR PRINIRING COLOrs on cmd/PowerShell
prompt!

x.field_names=['EmpName','Gender','EmpId','Designation','Age','Emp_Mail','Sala
ry']
# ATTRIBUTES OF TABLE

def progressbar():
        for i in trange(100):
        sleep(0.02) #LOADING INTERFACE FUNCTION


def menu():
          cprint(colored('[1] Enter 1 to use Employee Management System
          ','white','on_red'))
          print()
          cprint(colored('[2] Enter 2 to use File Reader
          ','magenta','on_white'))
          print()
```

```
        cprint(colored('[3] Enter 3 to use Covid Notification System
         ','grey','on_green'))
        print()
        cprint(colored('     SUDO TECH INCORPORATION     ','white','on_red'))
  print()

a=pyfiglet.figlet_format('MENU')
print()

print('================================================')

print(a)
menu()
choice=int(input('Enter your choice:'))
print()
print('------------------------------------------------')


if choice==1:

            def  sqlmenu():
                  print(
                        '''
                              [1]. ADD RECORD
                              [2]. DELETE RECORD
                              [3]. MODIFY RECORD
                              [4]. DISPLAY ALL RECORDS
                              [5]. SEARCH RECORDS
                              [6]. SEND A MAIL TO EMPLOYEE
                              [7]. EXIT THE PROGRAM''')


            print() #FORMATTING PURPOSE
            print()#fORMATTING
            print("[!] Connecting to Database !")
            sleep(1.0)
            print("[!] Initializing Database !")
            sleep(1)
            print('[!] Loading database records !')
            progressbar()
```

```
sleep(1)
print('DATABASE LOADED  SUCCESSULLY !')

cprint(colored('******EMPLOYEE
MANAGEMENTSYSTEM******','white','on_red'))

banner=pyfiglet.figlet_format('EMS')
print(banner)
cprint(colored("options:",'blue','on_white'))
print()

ans='y'

while ans=='y' or ans=='Y':
        sqlmenu()

        menu=int(input("Type your option : "))


        if menu==1:
                addrec()
                print()# For  some gap b/w records and y/n input


        elif menu==2:
                delrec()
                print()# For  some gap b/w records and y/n input

        elif menu==3:
                modrec()
                print()# For  some gap b/w records and y/n input

        elif menu==4:
                try:
                        L=disprec() #Store nested list of records

                        for data in L:
                                x.add_row(data) #
                        print(x)
```

```
                nt.notify(title='Success',message='RECORDS
                FOUND',app_icon='gtick.ico',timeout=3)
                beep(sound='ping')

                x.clear_rows()

            except Exception as e: #runtime error if no recs

                    cprint(colored('ERROR!!','white','on_red'))
                    nt.notify(title='Database
                    Empty',message='No records to display
                    ',app_icon='error.ico',timeout=3)
                    beep(sound='error')
                    print()
                    # For  some gap b/w records and y/n  input

    elif menu==5:
            try: #if not none

                    L=searchrec() #L WILL STORE LIST
                    x.add_row(L)
                    print(x)
                    nt.notify(title='Success',message='RECORD
                    FOUND',app_icon='gtick.ico',timeout=3)
                    beep(sound='ping')

                    x.clear_rows()

            except Exception as e:
                    cprint(colored('ERROR!!','white','on_red'))
                    print()# For  some gap b/w records and y/n input

                    nt.notify(title='Failure',message='Error',app_icon=
                    'error.ico',timeout=3)
                    beep(sound='error')


    elif menu==6:
```

```
                    try:
                        mailfun()


                    except Exception as e:

                        cprint(colored("MAIL NOT SENT , PLEASE
                        CONNECT TO INTERNET!",'white','on_blue'))
                        nt.notify(title='Failure',message='Please connect
                        to Internet',app_icon='error.ico',timeout=3)
                        beep(sound="error")# Notifiication sound

                elif menu==7:
                    cprint(colored('BYE USER !!','white','on_red'))
                    nt.notify(title='Exit',message='BYE
                    USER',app_icon='redbell.ico',timeout=3)
                    beep(sound='success')

                    sleep(4)
                    exit()

                else:
                    print('Invalid option !!')
                    print()# For  some gap b/w records and y/n input
                    nt.notify(title='Invalid ',message='Invalid option
                    ',app_icon='error.ico',timeout=3)
                    beep(sound='error')


                ans=input("Want to continue type[y], else[n] :")


elif choice==2:
            freader()   # FILE READER


elif choice==3:
```

```
        print()
        cprint(colored('COVID__INFO__NOTIFIER__SYSTEM','white','on_red'))
        print()

        coronainfo()

        print('''After typing y you can close this program and
                notification will be sent to you every 15 minutes ''')

        print()
        ch3=input("If you want notification every 15 minute type[y],else[n]:")
        if ch3=='y' or 'Y':

                os.system('scheduler.bat')

                cprint(colored('Notification Scheduled for every 15 minutes
                !','white','on_red'))

        else:
                cprint(colored('Bye User','white','on_red'))


else:
                cprint(colored('Error , Invalid option!','white','on_red'))
                nt.notify(title='Invalid ',message='Invalid option
                !',app_icon='error.ico',timeout=3)
                beep(sound='error')
```

Coding (basic_op.py)

```
from email.mime.text import MIMEText
from email.mime.multipart import MIMEMultipart
import smtplib

from termcolor import cprint,colored
from colorama import init # WINDOWA PLATFORM

import mysql.connector as ms# for line 15
from time import sleep  # FOR LINE 19

from plyer import notification as nt # Notification system
from beepy import beep #Notification sound

init() #WNDOWS PLATFORM

try:

        mycon=ms.connect(host='localhost',user='root',passwd='Kali',database='Emplmgs',autocomm
        it=True) #,autocommit=True
         cursor=mycon.cursor()

except Exception as e:
    cprint(colored("Error connecting to databse!!",'white','on_yellow'))
    sleep(4)# TIME FOR USER TO READ ERROR MESSAGE
    exit() #TERMINATING THE PROGRAM



def addrec():
            EmpName=input('Enter Employee name :').upper()
            Gender=input("Enter gender [M]/[F] :").upper()
            EmpId=input('Enter unique 5 Digit Employee ID:').upper()
            Designation=input("Enter Designation :").upper()
            Age=int(input('Enter age of Employee:'))
            Emp_Mail=input("Enter E-Mail id of Employee:").lower()
            Sal=int(input("Enter Salary of Employee :"))

            add_query="insert into Emplrec
            values('{}','{}','{}','{}',{},'{}',{})".format(EmpName,Gender,EmpId,Designation,Age,Emp_M
            ail,Sal)
             cursor.execute(add_query)
            mycon.commit()
            cprint(colored("RECORD ADDED SUCCESSULLY !",'white','on_red'))
             nt.notify(title='Success',message='RECORDS ADDED
```

```
                SUCCESSULLY',app_icon='gtick.ico',timeout=3)
                beep(sound='ping')
                #Notification SYSTEM

def delrec():
                EmpId=input("Enter unique 5 Digit Employee ID:").upper()
                CHK_QUERY='Select * from Emplrec where EmpId="{}"'.format(EmpId)
                cursor.execute(CHK_QUERY)
                datachk=cursor.fetchone() #NONE IF IT IS EMPTY

                if datachk!=None:

                    EmpName,Gender,EmpId,Designation,Age,Emp_Mail,Salary=datachk
                    del_query='Delete from Emplrec where EmpId="{}"'.format(EmpId)
                    cursor.execute(del_query)
                    mycon.commit()
                    cprint(colored("RECORD DELETED SUCCESSULLY !",'white','on_red'))
                    nt.notify(title='Success',message='Record deleted
                    successfully',app_icon='gtick.ico',timeout=3)
                    beep(sound='ping')

                else:
                    cprint(colored("INVALID EMPID , ID DOES NOT EXIST IN DATABASE
                     !",'green','on_white'))
                    nt.notify(title='Error!',message='EMPID DOES NOT EXIST IN DATABASE
                     !',app_icon='error.ico',timeout=3)
                    beep(sound='error')


def searchrec():
    Id=input("Enter unique 5 Digit Employee ID:").upper()
    search_q="Select * from Emplrec where EmpId='{}'".format(Id)
    cursor.execute(search_q)
    data=cursor.fetchone() #iT RETURNS NONE IF IT IS EMPTY

    if data!=None:

        EmpName,Gender,EmpId,Designation,Age,Emp_Mail,Salary=data
        L=[EmpName,Gender,EmpId,Designation,Age,Emp_Mail,Salary]
        return L

    else:
        cprint(colored('INVALID ID !!, ID DOES NOT EXIST','grey','on_white'))



def disprec():
    l=[]#TO HOLD ALL RECORDS
```

```
    dis_q='Select * from Emplrec'
    cursor.execute(dis_q)
    data=cursor.fetchall() # LIST TYPE ELEMENT

    if data!=[]:  #IF RECORDS ARE PRESENT
        for row in data:   # iTERATING THROUGH THE RESULT SET
            # print(row) NOT PRINTING TUPLE , SHOWING TABLE..
            l.append(list(row)) #CONVERTING TUPLE TO LIST(NESTED) FOR ADDING IN PRETTYTABLE
        return l

    else: # IF NO RECORDS IN DATABASE
        cprint(colored('NO RECORDS EXIST!, DATABASE EMPTY!','white','on_blue'))

def mailfun():
    EmpId=input("Enter EmpId of Employee:")
    EmpId=EmpId.upper()
    q="Select * from Emplrec where EmpId='{}'".format(EmpId)
    cursor.execute(q)
    r=cursor.fetchone()
    if r!=None:

            EmpName,Gender,EmpId,Designation,Age,Emp_Mail,Salary=r # UNPACKING .....

            Msg=MIMEMultipart()
            BOT_ID='sudocorporations@gmail.com'
            BOT_PWD='sudo_tech@#'
            server=smtplib.SMTP('smtp.gmail.com',587) #HOST AND PORT
            # server.ehlo()
            server.starttls()#Transport layer secuirity encryption
            server.login(BOT_ID,BOT_PWD)

            Subject=input('Enter Subject of mail:')
            body=input('Enter body of mail:')
            body=body+'\n'+ '\n' + "Thank you"+ '\n' +"Sudo Corporations"
            Msg["From"]=BOT_ID
            Msg['To']=Emp_Mail
            Msg["Subject"]=Subject
            Msg.attach(MIMEText(body,'plain')) #ATTACHING BODY
            content=Msg.as_string()
            server.sendmail(BOT_ID,Emp_Mail,content)
            print()
            o=f"MAIL SENT SUCCESSFULLY TO {EmpName} whose EmpID is: {EmpId}"
            cprint(colored(o,'white','on_red'))
            server.quit()
            nt.notify(title='Success',message='Mail sent successfully',app_icon='gtick.ico',timeout=3)
            beep(sound="ping") # Notification sound
```

```
else:
    cprint(colored("INVALID EmpId !!",'white','on_green'))
    nt.notify(title='INVALID ID',message='Id does not exist in
    database!',app_icon='error.ico',timeout=3)
    beep(sound="error") # Notifiication sound
```

CODING(modfun.py)

```
import mysql.connector as ms
from colorama import init
from time import sleep
from termcolor import cprint,colored
from plyer import notification as nt # Notification system
from beepy import beep #Notification sound

init()
try:

        mycon=ms.connect(host='localhost',user='root',passwd='Kali',database='Emplmgs',autocomm
        it=True)   #,autocommit=True
        cursor=mycon.cursor()

except Exception as e:
    cprint(colored("Error connecting to databse!!",'white','on_red'))
    sleep(4)# TIME FOR USER TO READ ERROR MESSAGE
    exit() #TERMINATING THE PROGRAM


def modrec():
#EMPID HAS ALREADY UNIQUE CONSTRAINT CHECK IN MYSQL
        print(
        '''
        [1]. EmpName

        [2]. Gender

        [3]. Designation

        [4]. Age

        [5]. Emp_Mail

        [6]. Salary

        [7]. Increase Salary by %

        [8]. Decrease Salary by %
        '''
        )


        ch=int(input('Enter your choice:'))
```

```
EID=input("Enter unique 5 Digit Employee ID:").upper() #to match casing

chk_q="Select * from Emplrec where EMPID='{}'".format(EID)
cursor.execute(chk_q)
r=cursor.fetchone()
if r!=None:
    EmpName,Gender,EmpId,Designation,Age,Emp_Mail,Salary=r
    if ch==1:

            field="Name" # For sending in mail
            New_Name=input('Enter new name :').upper()
            query='update Emplrec set EmpName="{}" where
             EmpId="{}"'.format(New_Name,EID)
            cursor.execute(query)
            mycon.commit()
            o=f'NAME UPDATED SUCCESSULLY TO : {New_Name} '
            cprint(colored(o,'white','on_red'))
            nt.notify(title='Updation Successful',message='NAME UPDATED
            SUCCESSULLY',app_icon='gtick.ico',timeout=3)
            beep(sound='ping')


    elif ch==2:

            field="Gender"
            Gen=input("Enter new gender [M]/[F]:").upper()
            query='update Emplrec set Gender="{}" where EmpId="{}"'.format(Gen,EID)
            cursor.execute(query)
            mycon.commit()
            o=f"GENDER UPDATED SUCCESSULLY TO: {Gen}"
            cprint(colored(o,'white','on_red'))
            nt.notify(title='Updation Successful',message='GENDER UPDATED
            SUCCESSULLY',app_icon='gtick.ico',timeout=3)
            beep(sound='ping')



    elif ch==3:
            field="Designation"
            Des=input("Enter New Designation:").upper()
            query='update Emplrec set Designation="{}" where EmpId="{}"'.format(Des,EID)
            cursor.execute(query)
            mycon.commit()
            o=f"DESIGNATION UPDATED SUCCESSULLY TO : {Des}"
            cprint(colored(o,'white','on_red'))
            nt.notify(title='Updation Successful',message='DESIGNATION UPDATED
            SUCCESSULLY',app_icon='gtick.ico',timeout=3)
            beep(sound='ping')
```

```
elif ch==4:
        field='Age'
        age=int(input("Enter new age:"))
        query='update Emplrec set Age={} where EmpId="{}"'.format(age,EID)
        cursor.execute(query)
        mycon.commit()
        o=f"AGE UPDATED SUCCESSULLY TO :{age}"
        cprint(colored(o,'white','on_red'))
        nt.notify(title='Updation Successful',message='AGE UPDATED
        SUCCESSULLY',app_icon='gtick.ico',timeout=3)
        beep(sound='ping')

elif ch==5:
        field="MAIL ID"
        mail_id=input("Enter new mail id :").lower()

        query='update Emplrec set Emp_Mail="{}" where
        EmpId="{}"'.format(mail_id,EID)
        cursor.execute(query)
        mycon.commit()
        o=f'MAIL ID UPDATED SUCCESSULLY TO:{mail_id}'
        cprint(colored(o,'white','on_red'))
        nt.notify(title='Updation Successful',message='MAIL ID UPDATED
        SUCCESSULLY',app_icon='gtick.ico',timeout=3)
        beep(sound='ping')



elif ch==6:
        field="Salary"
        sal=int(input("Enter updated Salary :"))
        sal_q="update Emplrec set Salary={} where EmpId='{}'".format(sal,EID)
        cursor.execute(sal_q)
        mycon.commit()
        o=f"SALARY UPDATED SUCCESSULLY TO: {sal}"
        cprint(colored(o,'white','on_red'))
        nt.notify(title='Updation Successful',message='SALARY UPDATED
        SUCCESSULLY',app_icon='gtick.ico',timeout=3)
        beep(sound='ping')


elif ch==7:
    per=int(input("Enter the % by which salary to be Increased:"))
    r_per=per/100
    in_sal=int((Salary)+(Salary*r_per))
    q="Update Emplrec set Salary={} where EmpId='{}'".format(in_sal,EID)
```

```
            cursor.execute(q)
            mycon.commit()
            o=f"SALARY HAS BEEN INCREASED BY {per}%"
            cprint(colored(o,'white','on_red'))
            nt.notify(title='Updation Successful',message='Salary
            Increased!',app_icon='gtick.ico',timeout=3)
            beep(sound='ping')



        elif ch==8:
            per=int(input("Enter the % by which salary to be Decreased:"))
            r_per=per/100
            de_sal=int((Salary)-(Salary*r_per))
            # print(de_sal)
            q="Update Emplrec set Salary={} where EmpId='{}'".format(de_sal,EID)
            cursor.execute(q)
            mycon.commit()
            o=f"SALARY HAS BEEN DECREASED BY {per}%"
            cprint(colored(o,'white','on_red'))
            nt.notify(title='Updation Successful',message='Salary
            Decreased!',app_icon='gtick.ico',timeout=3)
            beep(sound='ping')

        else:
            cprint(colored("INVALID OPTION!!",'green','on_white'))
            nt.notify(title='Error',message='Invalid option!',app_icon='error.ico',timeout=3)
            beep(sound='error')

    else:
        cprint(colored("INVALID EMPLOYEE ID , ID DOES NOT EXIST IN
        DATABASE",'white','on_red'))
        nt.notify(title='INVALID EMPLOYEE ID',message='ID DOES NOT EXIST IN
        DATABASE',app_icon='error.ico',timeout=3)
        beep(sound='error')
```

CODING(filereader.py)

```
import pyttsx3  #speech ENGINE
from colorama  import init  #WINDOWS COLOR FORMATTING
from termcolor import cprint,colored # COLOR FORMATTING TEXT
from time import sleep
import PyPDF2 #pdf file handling
import pyfiglet #ascii art
from tqdm import trange # loading interface module
import easygui  # GUI FILE INPUT
init()

engine=pyttsx3.init('sapi5') #SAPI5 IS THE WINDOWS API FOR IN-BUILT VOICES OF WINDOWS
voices=engine.getProperty('voices')
engine.setProperty('voice',voices[0].id)

def speak(text):
        engine.say(text)
        engine.runAndWait()


def progressbar():
        for i in trange(100):
                pass
                sleep(0.02) #LOADING INTERFACE FUNCTION

def freader():

                cprint(colored('[!] INITIALISING PROGRAM ...','grey','on_white'))
                speak('initialsing program in your system')


                print()
                cprint(colored('[!] CONFIGURING SETTINGS  ...','white','on_blue'))
                speak("configuring settings")

                print()

                cprint(colored('[!] LOADING.......','grey','on_yellow'))
                speak("loading program in your system")
                print()
                progressbar()
                print()

                cprint(colored('[!] LOADING SUCCESSFULLY'))
                speak('PROGRAM LOADED SUCCESSFULLY IN YOUR SYSTEM')
```

```
print()#FORMATTING PURPOSE
speak("Please enter your name user")
u_name=input("Please enter your name user: ")
print()

cprint(colored('****FILE READER****','white','on_red'))
print()#FORMATTING PURPOSE

a=pyfiglet.figlet_format('FILE  READER')
speak("FILE Reader")
print(a)


filetype=''' Supported File Types

                        [1]. Text
                        [2]. PDF
'''

cprint(colored(filetype,'grey','on_white'))
speak("Supported file types are of only text and pdf format  ")
ans='y'

while ans=='y'or ans=="Y":

            speak(f"Hey {u_name},, please select your file ")

            path=easygui.fileopenbox() # RETURNS THE PATH IN DOUBLE QUOTES

            if path!=None: # if user has  selected file

                        speak("The file has been selected")

                        if path.endswith('.pdf'):

                                    cprint(colored("PDF File
                                    Selected",'grey','on_yellow'))
                                    speak(f"You have selected a pdf file,,
                                    {u_name} ")
                                    speak(f'I am going ,,,,to read,, it ,,,for ,,,,you.
                                    ,,{u_name}')

                                    with open(path,'rb') as f:
                                                pdfr=PyPDF2.PdfFileReader(f)
                                                page=pdfr.numPages
                                                cprint(colored(f'No of pages in
                                                selected pdf
                                                :{page}','grey','on_yellow'))
```

```
                                        speak(f'No of pages in selected
                                        pdf are  :,{page}')

                                        speak(f"Reading it for you
                                        {u_name}")
                                        print('Reading.....')
                                        for i in range(page):
                                                t=pdfr.getPage(i)
                                                text=t.extractText()
                                                speak(text)


                                elif path.endswith('.txt'):
                                        cprint(colored("Text File
                                        Selected",'white','on_blue'))
                                        speak(f"You have selected a text file
                                        {u_name}")
                                        speak(f"Reading it for you {u_name}")

                                        with open(path) as f:
                                                con=f.read()
                                                speak(con)

                                else:
                                        speak("You have selected Unsupported file
                                        type ")
                                        speak("please select only pdf file or text file")
                                        cprint(colored("Unsupported file
                                        type",'white','on_red'))
                                        speak('Please select only .TEXT/PDF format
                                        file!!.')
                                        print("Only TEXT/PDF file type Supported!")


                                ans=input('To continue type[y] , otherwise type[n] to
                                exit: ')



                        else: #IF NO FILE SELECTED BY USER .
                                cprint(colored("You have not selected any file
                                ",'white','on_red'))
```

CODING (covidinfo.py)

```
import  requests
import json # for data to be converted in json format
from   plyer import  notification
from  termcolor import  cprint,colored
from  colorama  import  init
from  time  import  sleep
from  beepy import  beep


def coronainfo():
        init()  # Windows color formatting
        try:
                a=requests.get('https://corona-rest-api.herokuapp.com/Api/India')
        except:
                cprint(colored('Please connect to internet !','white','on_red'))
                sleep(4)
                print()
                cprint(colored('Terminating the program....,','white','on_green'))
                exit()

        t=a.json() # Converting above data to json format
        di=t["Success"]

        info=f'''
Total Cases: {di['cases']}
Total Deaths: {di['deaths']}
Cases Active: {di['active']}
Recovered : {di['recovered']}
Cases Today: {di['todayCases']}
Deaths Today: {di['todayDeaths']}
Critical : {di['critical']}
Tests Today: {di['totalTests']}
'''

        notification.notify(title="Covid Info
        India",message=info,app_icon='updater.ico',timeout=18,app_name="CovidSta
        ts")
        beep(sound='ready')
```

CODING

```
from time import sleep
from covidinfo import coronainfo
while True:
        coronainfo()
        sleep(15*60)
```

covidnotscr.py

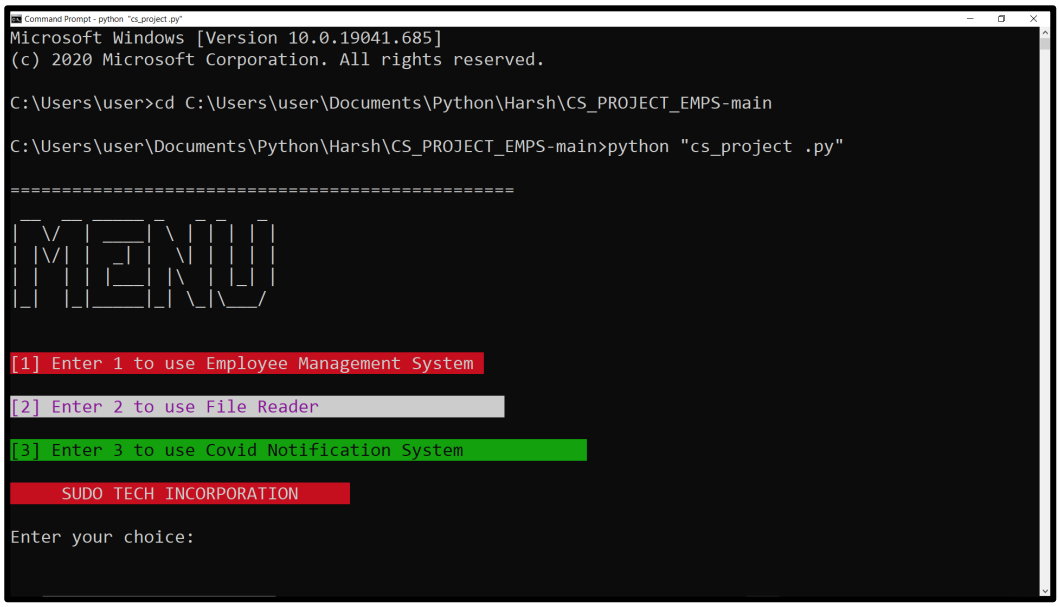
```
START pythonw.exe covidnotscr.py


exit
```

scheduler.bat

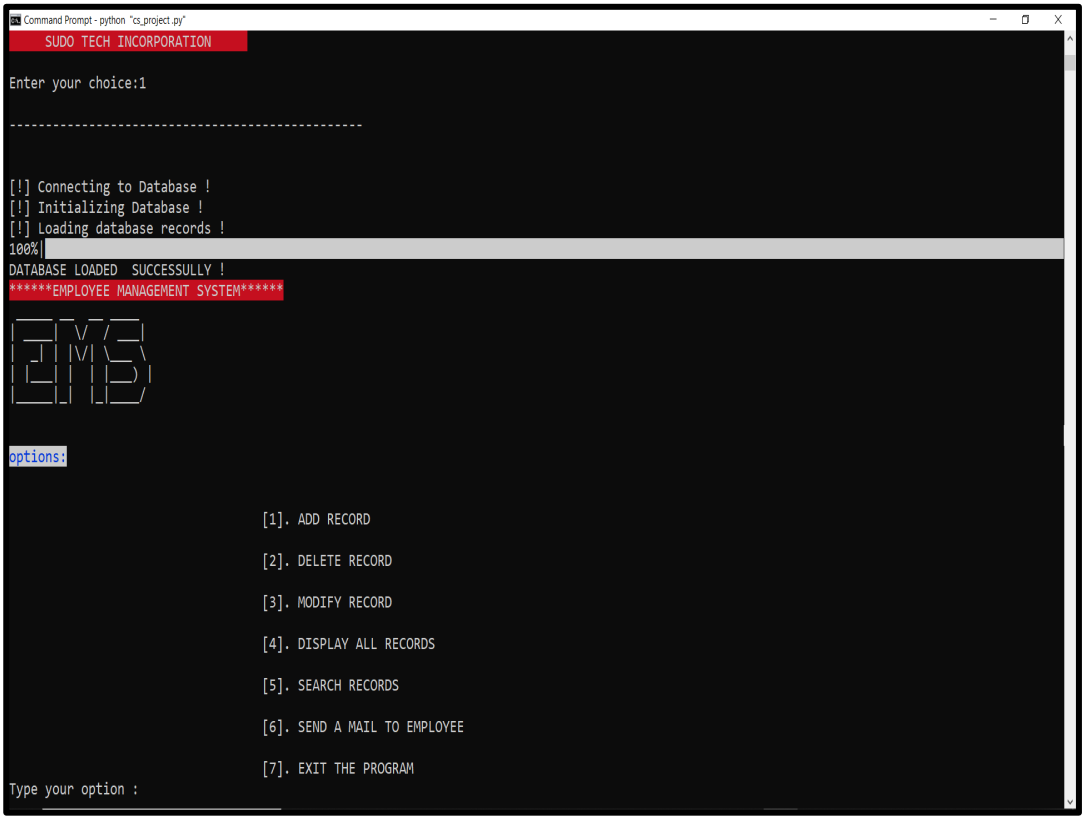
```
colorama==0.4.1
easygui==0.98.1
mysql-connector-python==8.0.22
prettytable==1.0.1
pyfiglet==0.8.post1
PyPDF2==1.26.0
pyttsx3==2.7
termcolor==1.1.0
tqdm==4.54.1
pywin32
beepy==1.0.7
plyer
requests
```

requirements.txt

Output Screens



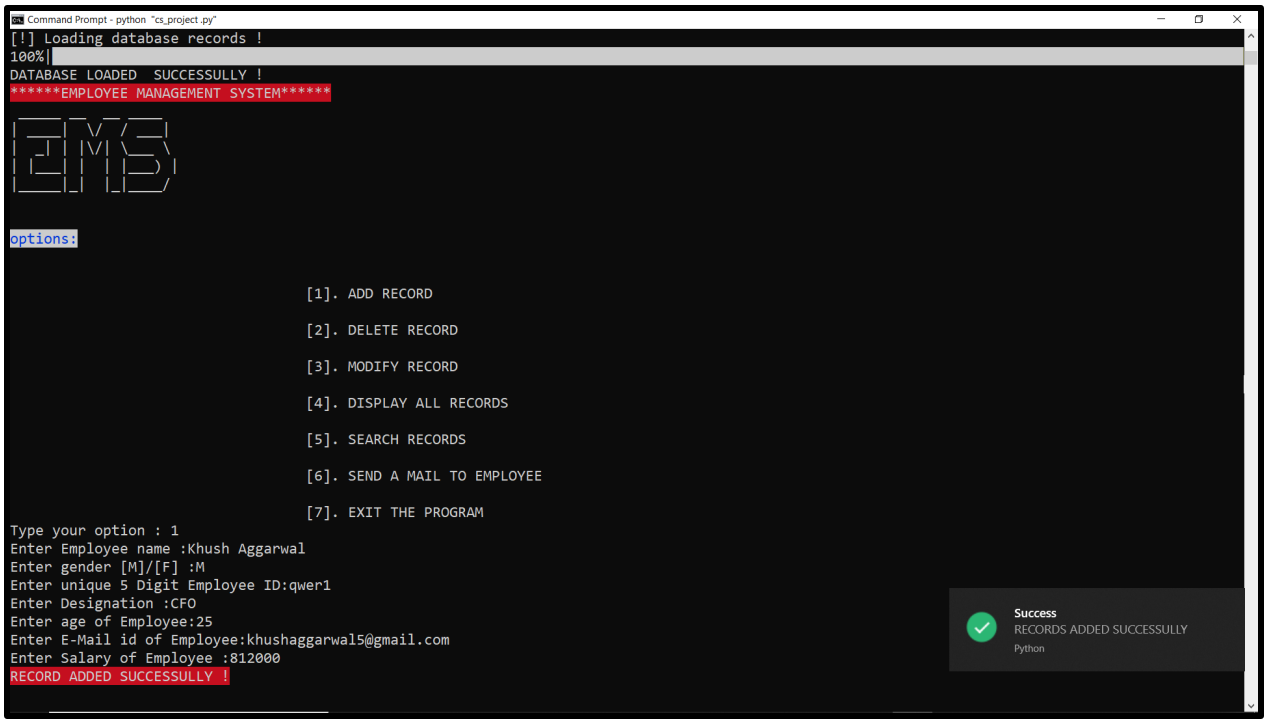
MENU



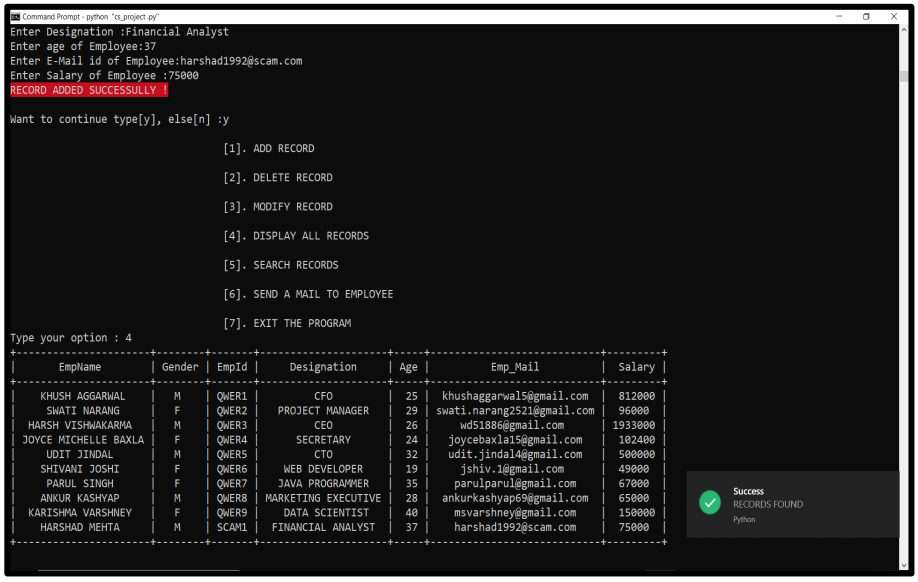
Employee Management system

(Selected)

Addition of record in database



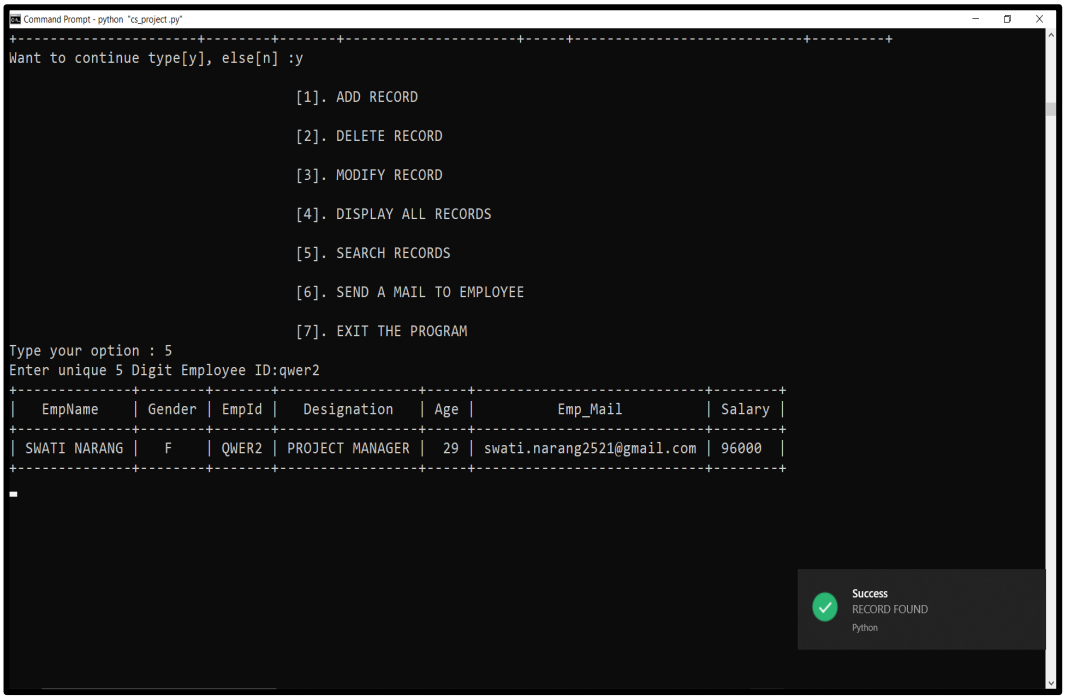
Notification was also displayed with a sound.



EmpName	Gender	EmpId	Designation	Age	Emp_Mail	Salary
KHUSH AGGARWAL	M	QWER1	CFO	25	khushaggarwal5@gmail.com	812000
SWATI NARANG	F	QWER2	PROJECT MANAGER	29	swati.narang2521@gmail.com	96000
HARSH VISHWAKARMA	M	QWER3	CEO	26	wd51886@gmail.com	1933000
JOYCE MICHELLE BAXLA	F	QWER4	SECRETARY	24	joycebaxla15@gmail.com	102400
UDIT JINDAL	M	QWER5	CTO	32	udit.jindal4@gmail.com	500000
SHIVANI JOSHI	F	QWER6	WEB DEVELOPER	19	jshiv.1@gmail.com	49000
PARUL SINGH	F	QWER7	JAVA PROGRAMMER	35	parulparul@gmail.com	67000
ANKUR KASHYAP	M	QWER8	MARKETING EXECUTIVE	28	ankurkashyap69@gmail.com	65000
KARISHMA VARSHNEY	F	QWER9	DATA SCIENTIST	40	msvarshney@gmail.com	150000
HARSHAD MEHTA	M	SCAM1	FINANCIAL ANALYST	37	harshad1992@scam.com	75000

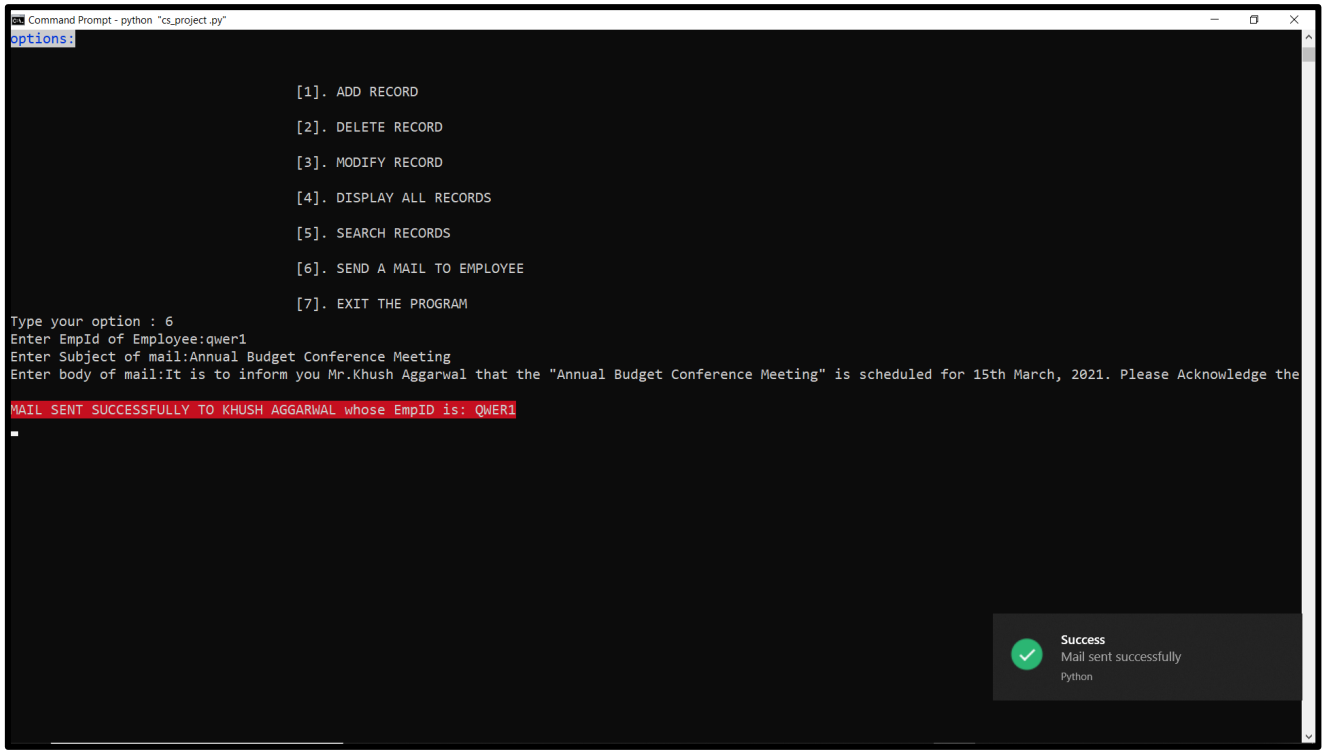
Deleting record in database.

Notification was also displayed with a sound.



Searching record in database.

Sending Mail to Employee



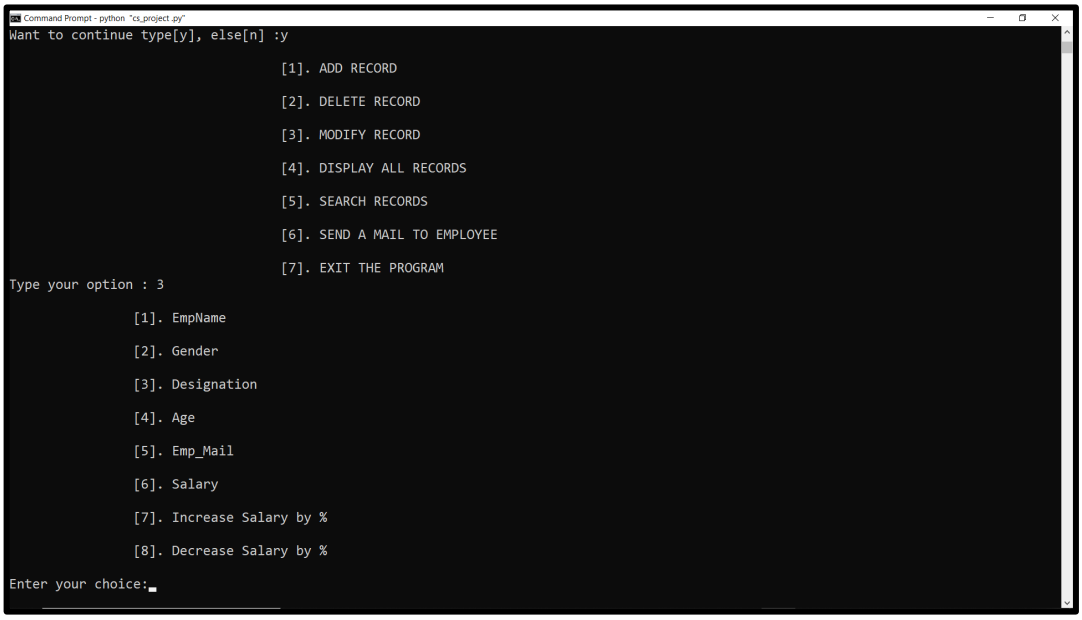
Notification was also displayed with a sound.

E-mail sent successfully!

Modifying records in database.

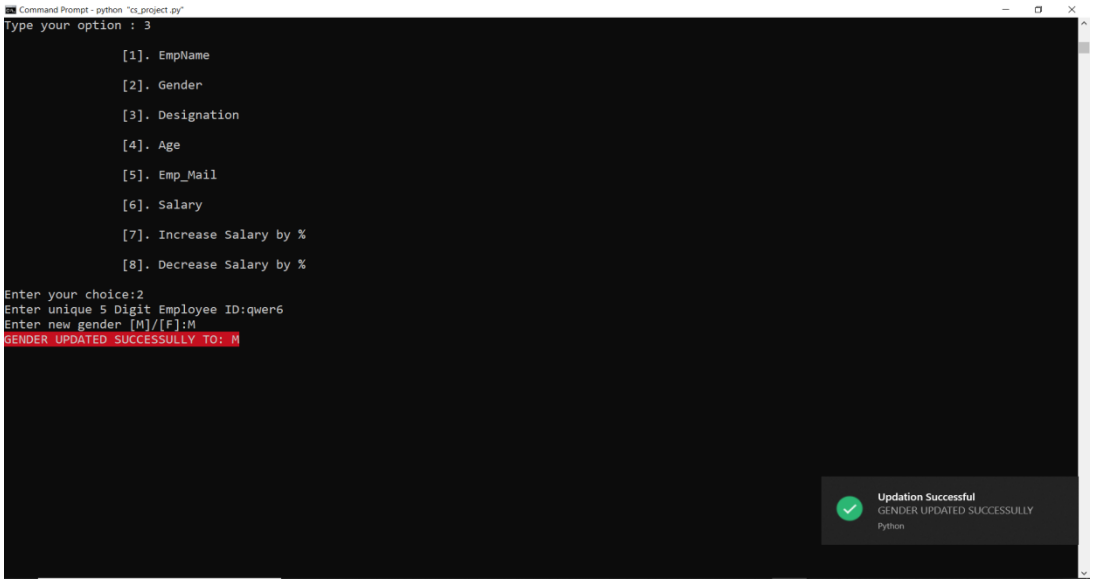
EmpName	Gender	EmpId	Designation	Age	Emp_Mail	Salary
KHUSH AGGARWAL	M	QWER1	CFO	25	khushaggarwal5@gmail.com	812000
SWATI NARANG	F	QWER2	PROJECT MANAGER	29	swati.narang2521@gmail.com	96000
HARSH VISHWAKARMA	M	QWER3	CEO	26	wd51886@gmail.com	1933000
JOYCE MICHELLE BAXLA	F	QWER4	SECRETARY	24	joycebaxla15@gmail.com	102400
UDIT JINDAL	M	QWER5	CTO	32	udit.jindal4@gmail.com	500000
SHIVANI JOSHI	F	QWER6	WEB DEVELOPER	19	jshiv.1@gmail.com	49000
PARUL SINGH	F	QWER7	JAVA PROGRAMMER	35	parulparul@gmail.com	67000
ANKUR KASHYAP	M	QWER8	MARKETING EXECUTIVE	28	ankurkashyap69@gmail.com	65000
KARISHMA VARSHNEY	F	QWER9	DATA SCIENTIST	40	msvarshney@gmail.com	150000
HARSHAD MEHTA	M	SCAM1	FINANCIAL ANALYST	37	harshad1992@scam.com	75000

Table Before Modification of records

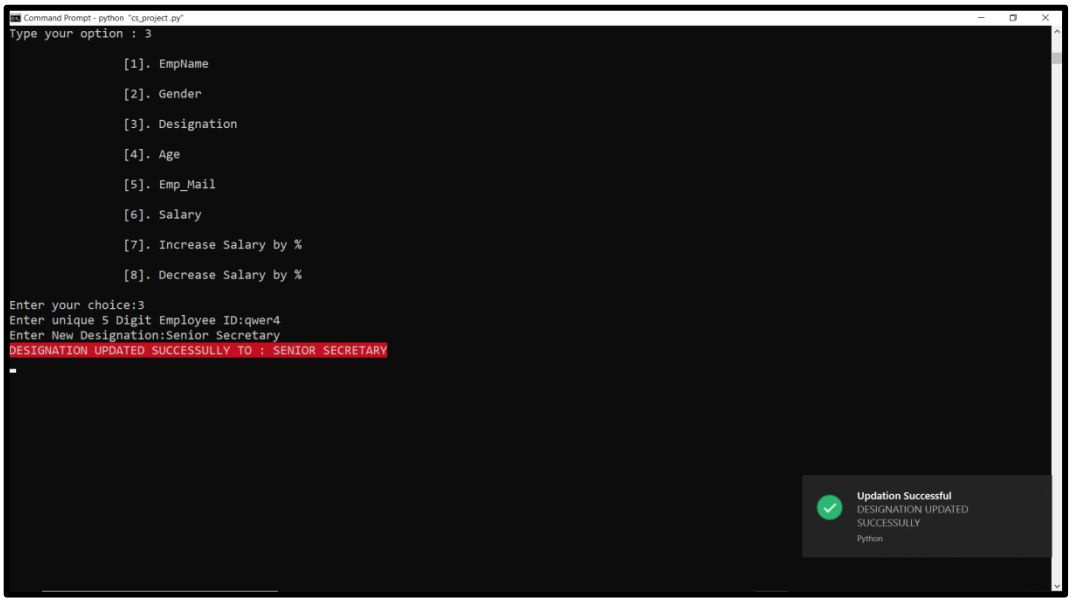


Modification Menu

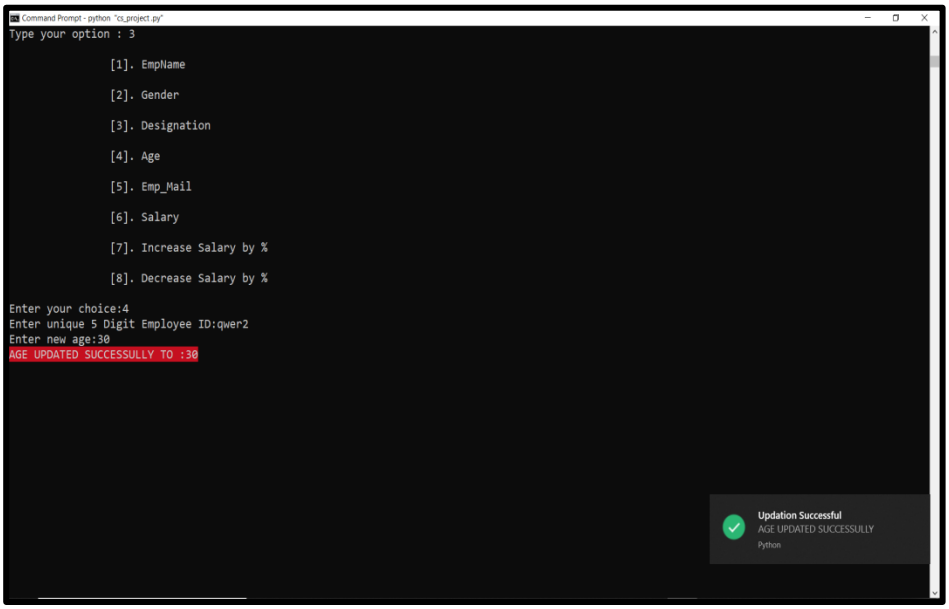
Modifying Employee Name



Modifying Employee Gender

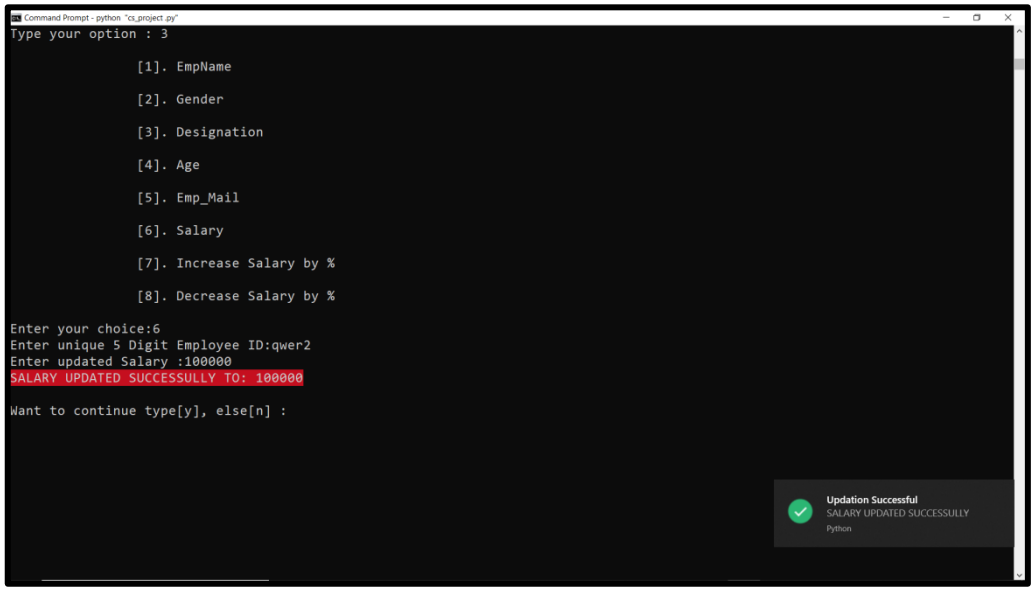


Modifying Employee Designation

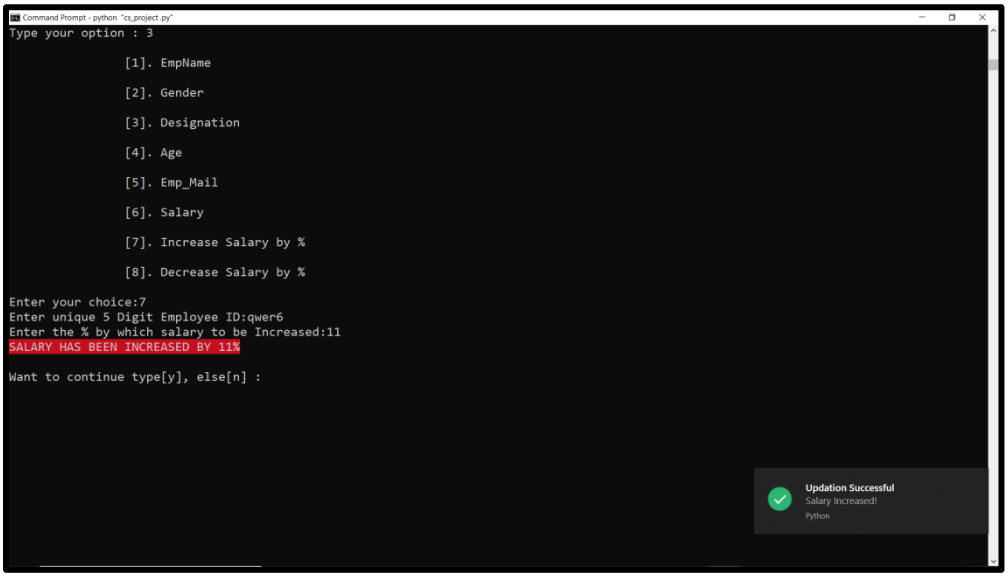


Modifying Employee Age

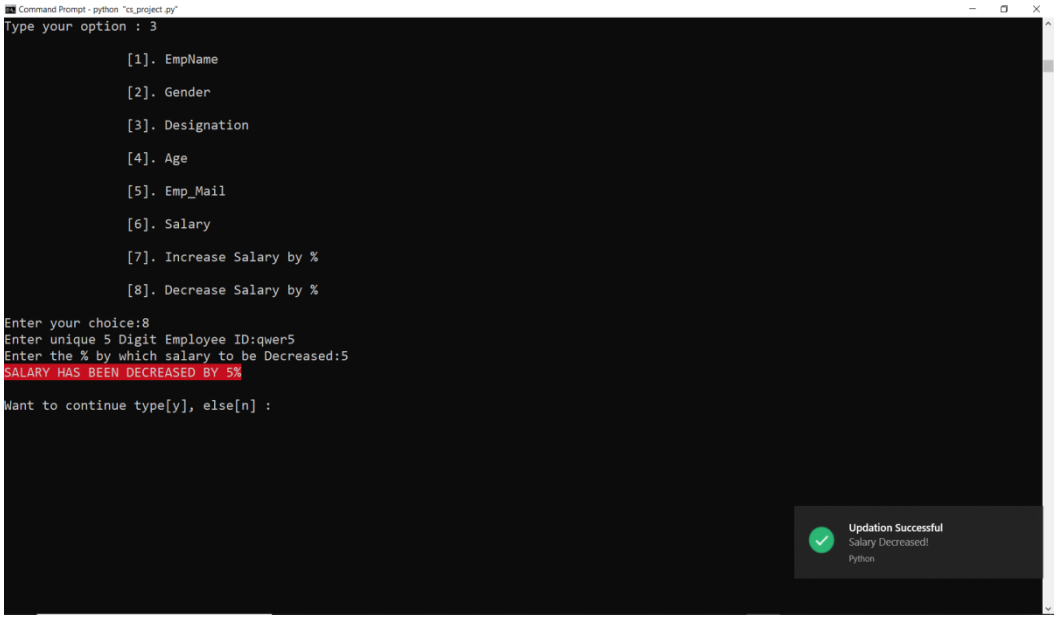
Modifying Employee Email



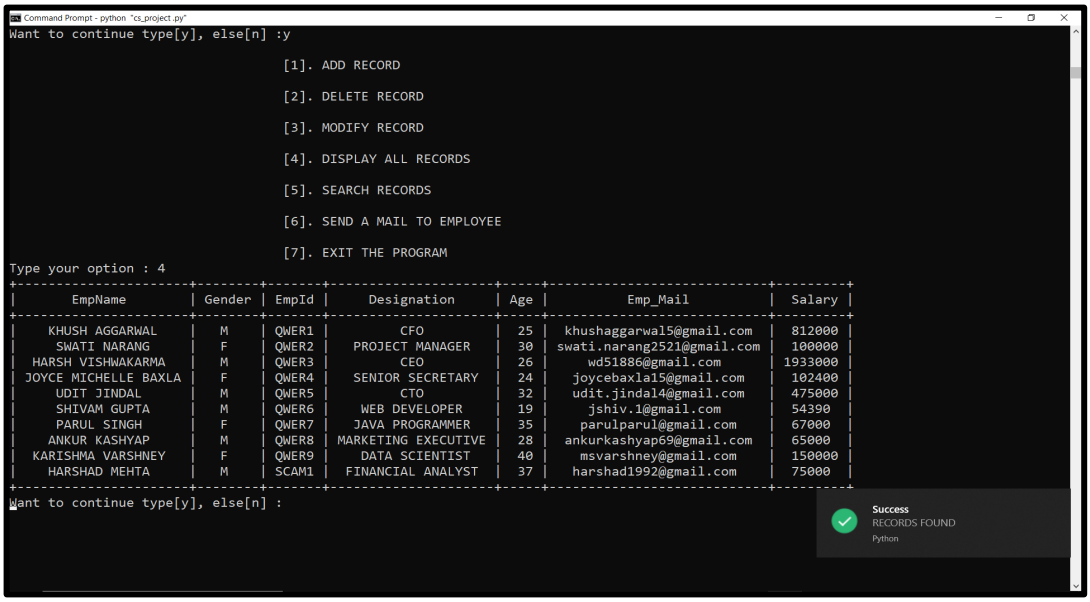
Modifying Employee Salary



Increasing Employee Salary



Decreasing Employee Salary



EmpName	Gender	EmpId	Designation	Age	Emp_Mail	Salary
KHUSH AGGARWAL	M	QWER1	CFO	25	khushaggarwal5@gmail.com	812000
SWATI NARANG	F	QWER2	PROJECT MANAGER	30	swati.narang2521@gmail.com	100000
HARSH VISHWAKARMA	M	QWER3	CEO	26	wd51886@gmail.com	1933000
JOYCE MICHELLE BAXLA	F	QWER4	SENIOR SECRETARY	24	joycebaxla15@gmail.com	102400
UDIT JINDAL	M	QWER5	CTO	32	udit.jindal4@gmail.com	475000
SHIVAM GUPTA	M	QWER6	WEB DEVELOPER	19	jshiv.1@gmail.com	54390
PARUL SINGH	F	QWER7	JAVA PROGRAMMER	35	parulparul@gmail.com	67000
ANKUR KASHYAP	M	QWER8	MARKETING EXECUTIVE	28	ankurkashyap69@gmail.com	65000
KARISHMA VARSHNEY	F	QWER9	DATA SCIENTIST	40	msvarshney@gmail.com	150000
HARSHAD MEHTA	M	SCAM1	FINANCIAL ANALYST	37	harshad1992@gmail.com	75000

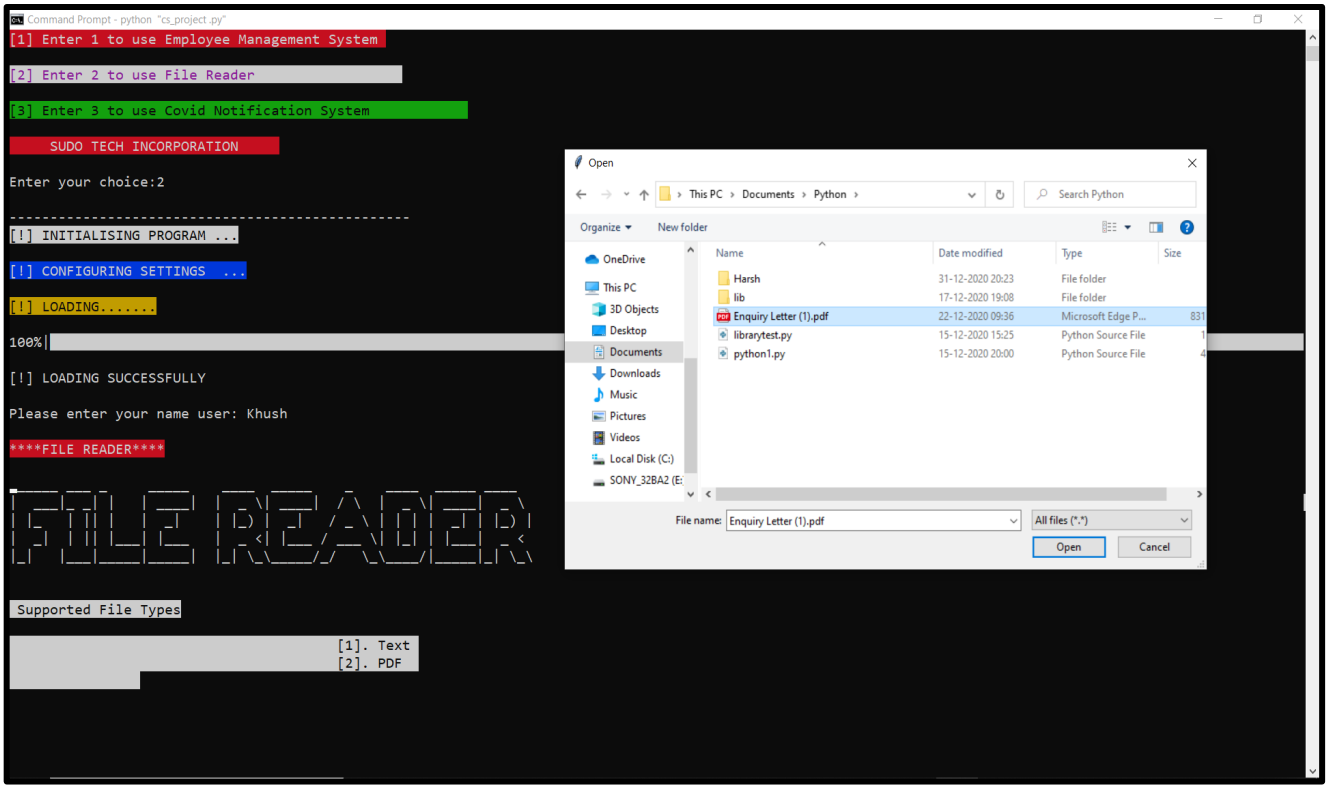
Table after doing above modifications

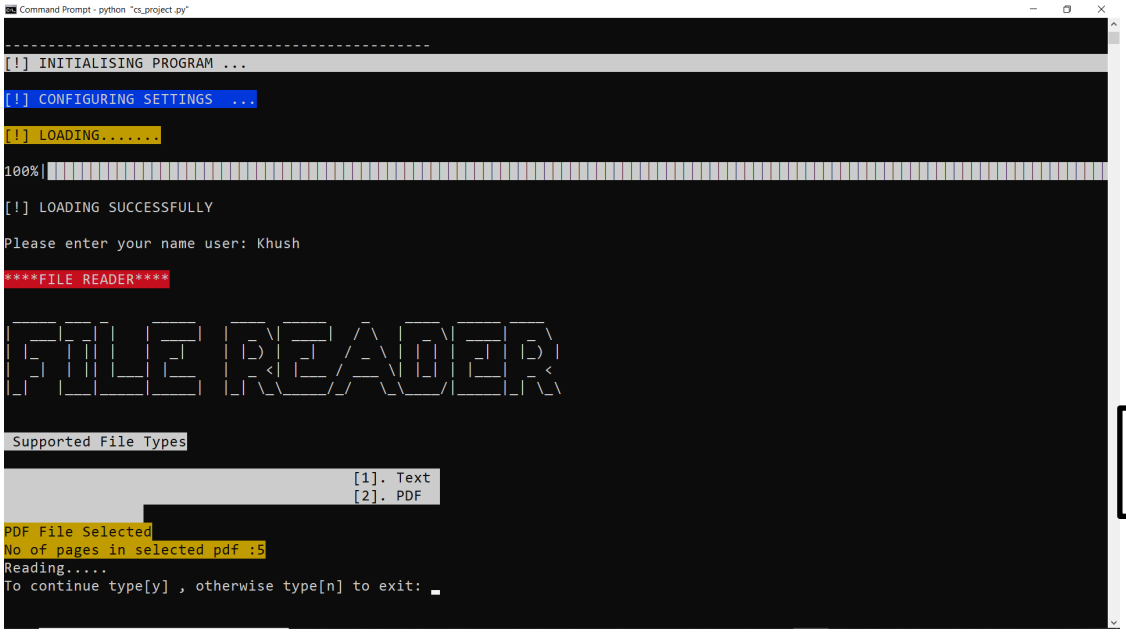

Command Prompt - python "cs_project.py"
Enter Employee name :Khush Aggarwal
Enter gender [M]/[F] :M
Enter unique 5 Digit Employee ID:qwer1
Enter Designation :CFO
Enter age of Employee:25
Enter E-Mail id of Employee:khushaggarwal5@gmail.com
Enter Salary of Employee :812000
RECORD ADDED SUCCESSULLY !
Want to continue type[y], else[n] :y
[1]. ADD RECORD
[2]. DELETE RECORD
[3]. MODIFY RECORD
[4]. DISPLAY ALL RECORDS
[5]. SEARCH RECORDS
[6]. SEND A MAIL TO EMPLOYEE
[7]. EXIT THE PROGRAM
Type your option : 7
BYE USER !!
Exit
BYE USER
Python

Exit

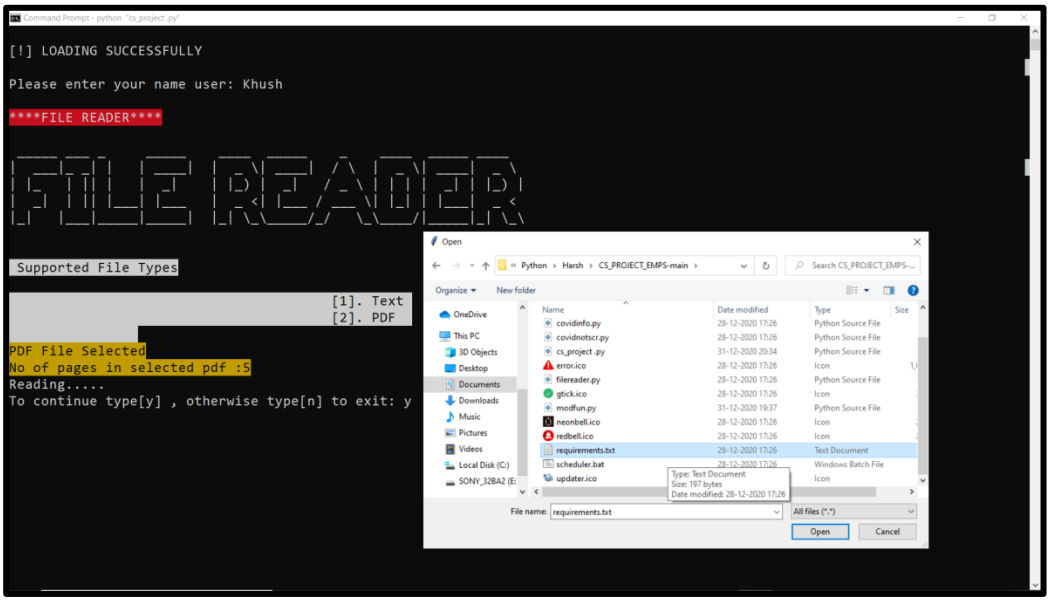
File Reader

Selecting Pdf File from System

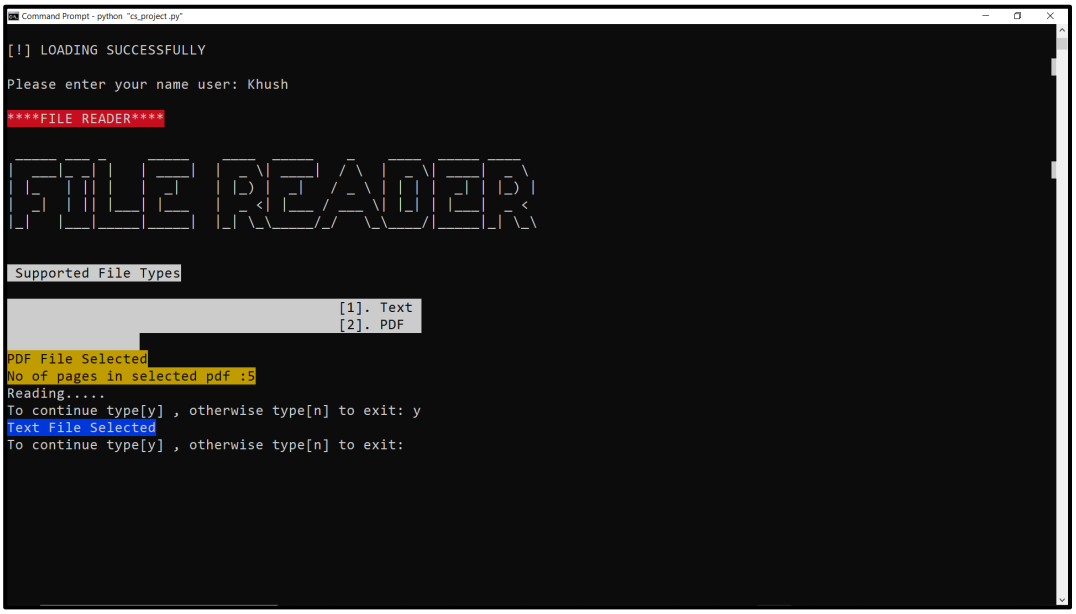




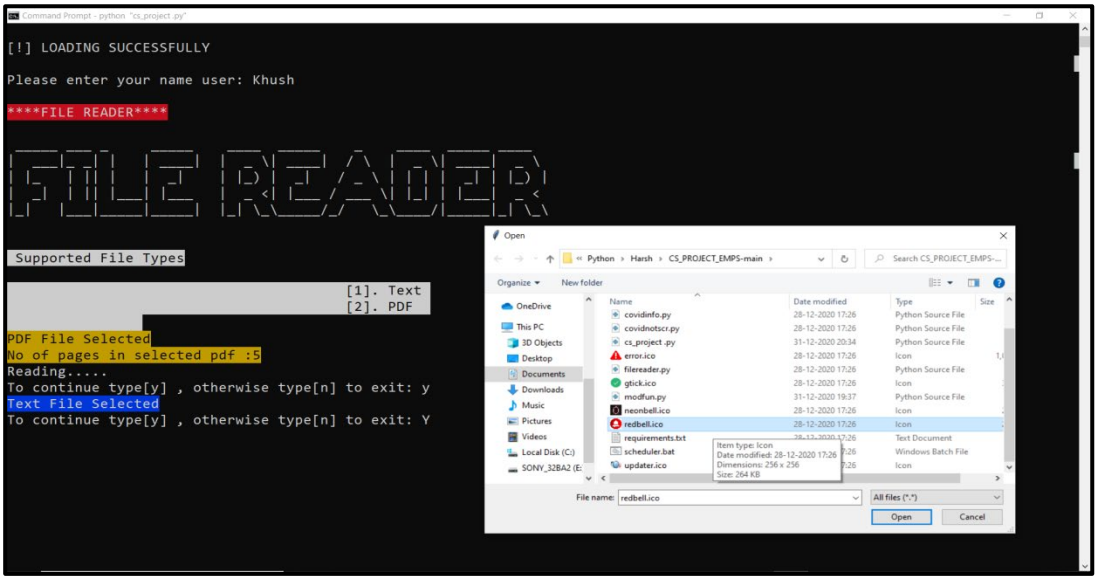
PDF File selected and was read by computer



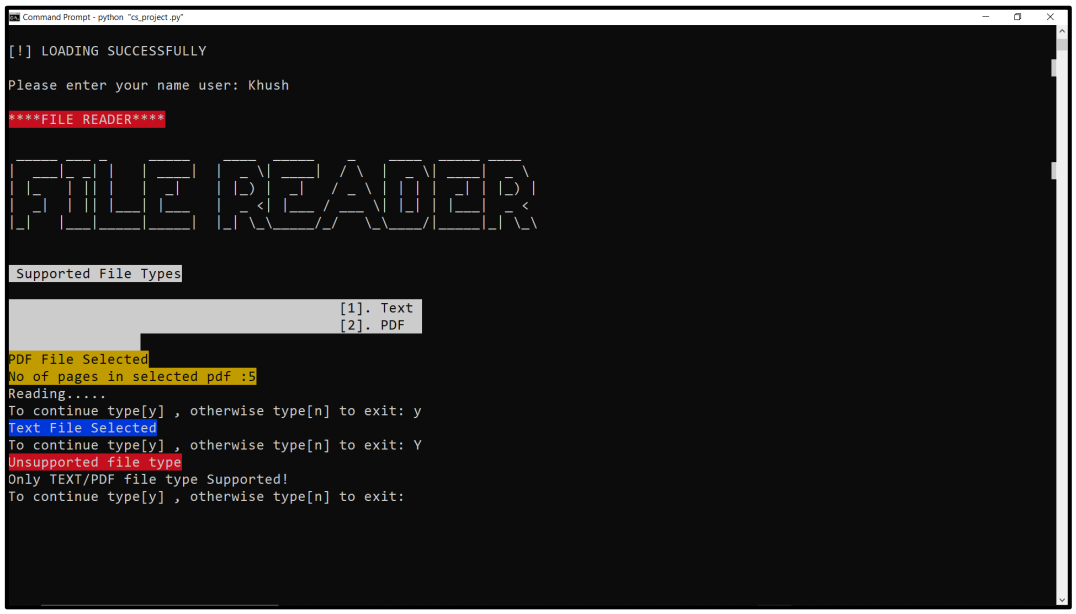
Selecting Text File from System



Text File Selected and was read by computer

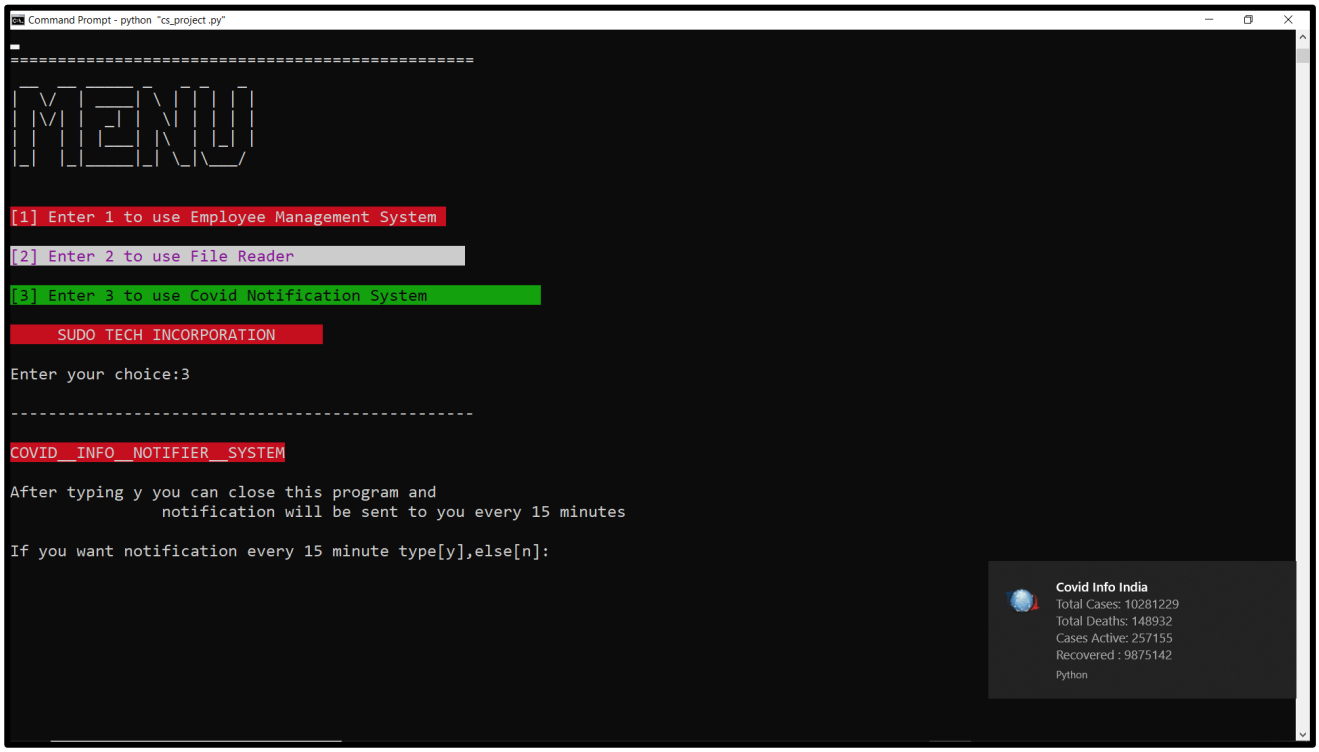


Unsupported file (.ico) has been selected

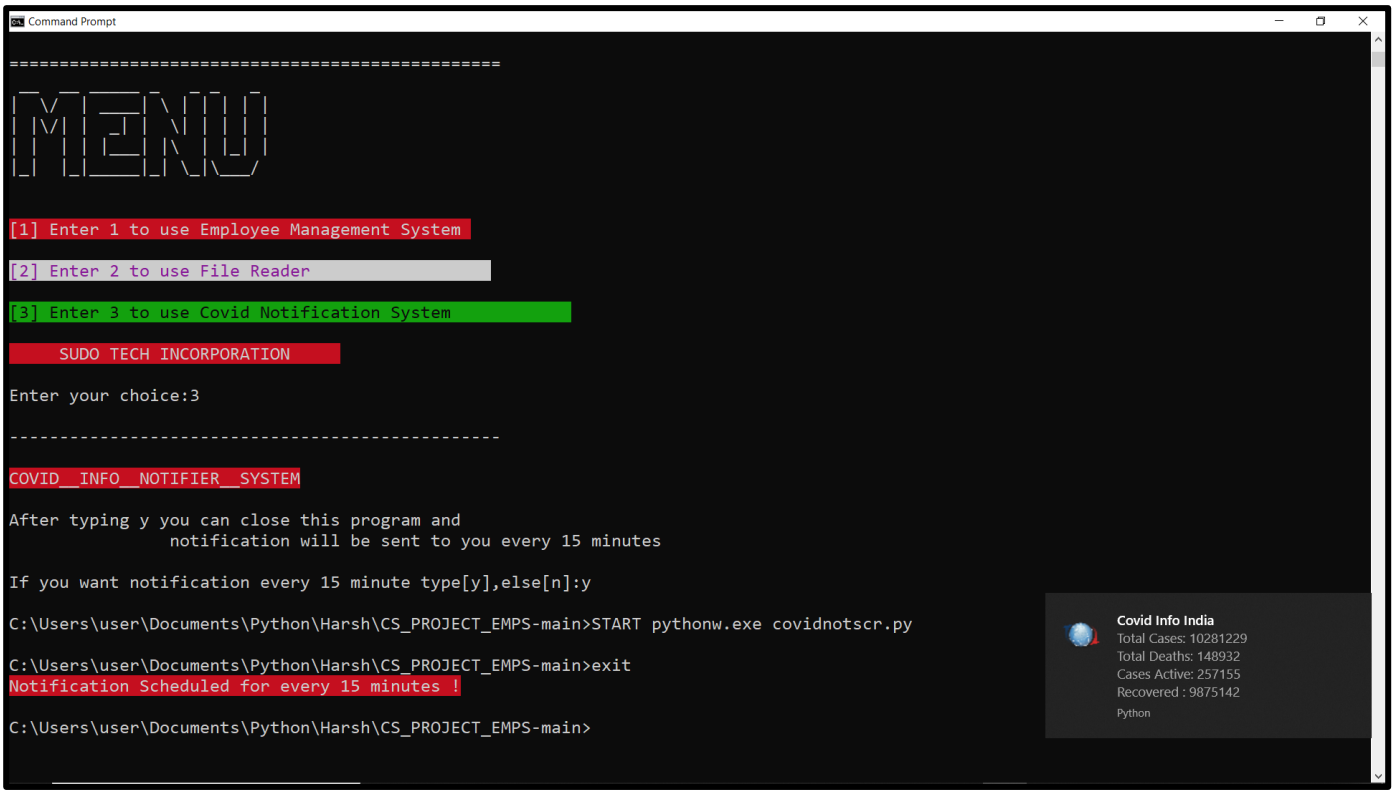


Unsupported file type error message displayed .

CORONAVIRUS NOTIFICATION SYSTEM



Notification has been sent on the system regarding the corona virus updates in INDIA.



Push-notifications scheduled for every 15 minutes .

Database and Table(s) used in MYSQL

TABLE: EMPLREC

Database: Emplmgs

MySQL 8.0 Command Line Client

```
Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use emplmgs;
Database changed
mysql> select * from emplrec;
+--------------------+--------+-------+--------------------+-----+--------------------------+---------+
| empname            | gender | EmpId | designation        | age | emp_mail                 | salary  |
+--------------------+--------+-------+--------------------+-----+--------------------------+---------+
| KHUSH AGGARWAL     | M      | QWER1 | CFO                |  25 | khushaggarwal5@gmail.com |  812000 |
| SWATI NARANG       | F      | QWER2 | PROJECT MANAGER    |  30 | swati.narang2521@gmail.com |  100000 |
| HARSH VISHWAKARMA  | M      | QWER3 | CEO                |  26 | wd51886@gmail.com        | 1933000 |
| JOYCE MICHELLE BAXLA | F    | QWER4 | SENIOR SECRETARY   |  24 | joycebaxla15@gmail.com   |  102400 |
| UDIT JINDAL        | M      | QWER5 | CTO                |  32 | udit.jindal4@gmail.com   |  475000 |
| SHIVAM GUPTA       | M      | QWER6 | WEB DEVELOPER      |  19 | jshiv.1@gmail.com        |   54390 |
| PARUL SINGH        | F      | QWER7 | JAVA PROGRAMMER    |  35 | parulparul@gmail.com     |   67000 |
| ANKUR KASHYAP      | M      | QWER8 | MARKETING EXECUTIVE |  28 | ankurkashyap69@gmail.com |   65000 |
| KARISHMA VARSHNEY  | F      | QWER9 | DATA SCIENTIST     |  40 | msvarshney@gmail.com     |  150000 |
| HARSHAD MEHTA      | M      | SCAM1 | FINANCIAL ANALYST  |  37 | harshad1992@gmail.com    |   75000 |
+--------------------+--------+-------+--------------------+-----+--------------------------+---------+
10 rows in set (0.00 sec)

mysql>
```

STRUCTURE OF TABLE

MySQL 8.0 Command Line Client

```
10 rows in set (0.00 sec)

mysql> desc emplrec;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| empname     | varchar(30) | NO   |     | NULL    |       |
| gender      | char(1)     | NO   |     | NULL    |       |
| EmpId       | char(5)     | NO   | PRI | NULL    |       |
| designation | varchar(20) | NO   |     | NULL    |       |
| age         | int         | NO   |     | NULL    |       |
| emp_mail    | varchar(30) | NO   |     | NULL    |       |
| salary      | int         | NO   |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
7 rows in set (0.00 sec)

mysql>
```

BIBLIOGRAPHY

- COMPUTER SCIENCE WITH PYTHON
  SUMITA ARORA CLASS XI

- COMPUTER SCIENCE WITH PYTHON
  SUMITA ARORA CLASS XII