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ACKNOWLEDGEMENT

In the present world of competition there is a race of excellence in which, those who have the will to come forward, succeed. With this spirit, I took part in this project. First of all, I would like to thank my parents who have always supported and encouraged me up to this stage. I feel proud in thanking our teacher Mrs. Asha Ma'am whose help was essential to complete the project. I would also like to express my gratitude to our principal Mr. Manoj Kumar for blessing us with such a golden opportunity to enhance our coding skills. I thank everyone from my friends to my teachers for helping me to accomplish this task.

DECLARATION

I hereby declare that the project entitled “Space Agencies” submitted to St. Gregorios School, Dwarka for the subject of “Computer Science” under the guidance of Mrs. Asha Ma’am is a record of original work done by me by gaining the knowledge related to the project from certain resources.

Harsh Kumar

XII B

CERTIFICATION

This is to certify that Harsh Kumar of class XII-B, St. Gregorios School has successfully completed his Computer Science project on the topic ‘Space Agencies’ as prescribed by Mrs. Asha Ma’am in the academic year 2021-22 as per the guidelines issued by CBSE. It is further certified that this project is individual work of the candidate.

ABOUT THE PROJECT

We all know that the space beyond the horizon of earth is a place full of mysteries. Luckily, there are many space agencies in the world, both public and private, whose only job is to keep researching on what lies beyond. However, many of us are not aware of the recent updates or backgrounds of even the most largest space agencies in the world. So, I have taken the initiative to organise data from various sources and bring it under one roof in a user friendly format.

The program also offers the option of adding, deleting, and altering data to the authorized users while normal viewers can view all the data.

ABOUT PYTHON AND MYSQL

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance. Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

MySQL is a relational database management system (RDBMS) based on the Structured Query Language, which is the popular language for accessing and managing the records in the database. MySQL is open-source and free software under the GNU license. It is supported by Oracle Company. An RDBMS is a type of database management system (DBMS) that stores data in a row-based table structure which connects related data elements. An RDBMS includes functions that maintain the security, accuracy, integrity and consistency of the data.

PROJECT SYNOPSIS

Title of the Project:

Government and Private Space Agencies

Problem Definition:

Information about the major space agencies (Govt.): Name, Acronym, and Date of foundation, Current Directing Manager, Abilities of the agencies: 1. Launch Capability 2. Human Spaceflight 3. Extraterrestrial Landing Capability, Budget assigned (in million USD) 4. Space Station , Detailed description

Information about the major space agencies (Private) : Name , Date of Foundation , Founder , Current CEO , Annual Expenditure (Funding by stakeholders) , Location of Headquarters , Detailed description

Only authorised users (more than 1) would be able to change / update, delete and add the data provided.

Contribution / Team Members: Harsh Kumar (individual)

Team Detail: The project is developed by Harsh Kumar in 7 days working 1 hour daily

Reason for choosing the topic:

Space exploration is one of the most advancing industries in both government and private sector. The industry employs the most intelligent people in the world. Still some people are not aware of them, their current projects, their background etc. So I have taken the initiative to collect and organise the data from various sources and present it in a user-friendly manner. Data is subject to change so as to consider the views of the public.

Objective:

- To display the data of major government space agencies:
 - a) Name
 - b) Acronym
 - c) Date of foundation
 - d) Launch Capability (Yes/No)
 - e) Human Spaceflight (Yes/No)
 - f) Extraterrestrial Landing Capability (Yes/No)
 - g) Space Station (Yes/No)
 - h) Budget (in million USD)
 - i) Current Managing Director
- To display the data of major private space flight agencies :
 - a) Name
 - b) Date of Foundation
 - c) Founder
 - d) Current CEO
 - e) Annual Expenditure (Funding by stakeholders)
 - f) Location of HQ
 - g) Name of Launcher
 - h) Name of Sub-orbital Aircraft (if any)
- There will be an option to add more data, delete existing data, and change current data
- But only by authorised personnel (UserID and password would be asked before switching to data change portal)
- Non-authorised personnel would be given the email ID of an authorised person so that change of data can be suggested

Hardware Requirements:

- A computer / laptop with Operating System Windows 7 or higher
- X86 64-bit CPU (Intel / AMD structure)
- 4 GB RAM

- 5 GB free disk space

Software Requirements:

- Python 3.7 or higher version
- MySQL 5.5 command client
- Pip (for connectivity)
- MS Office Installed

Limitations:

1. Data entered can be more diverse if more research is done.
2. One time view – Choices are not saved
3. Data entered for modification would not be changed instantaneously (for non-authorised personnel)
4. Data would have to be changed manually.

References:

- Google.com + Wikipedia for research purposes
- Official Websites of the respective space agencies for details
- Online Python Documentation- for python command syntax
- Text Book – Class XI and XII – Computer Science NCERT

TABLE STRUCTURE

```
mysql> desc govt;
```

Field	Type	Null	Key	Default	Extra
S_No	int(11)	NO	PRI	0	
Country	varchar(20)	YES	UNI	NULL	
Name	varchar(50)	YES	UNI	NULL	
Acronym	varchar(10)	YES		NULL	
Founded_in	date	YES		NULL	
Launch_Capability	char(3)	YES		NULL	
Human_Spaceflight	char(3)	YES		NULL	
Extraterrestrial_Landing_Capability	char(3)	YES		NULL	
Budget_MillionUSD	double	YES		NULL	
Space_Station_Name_if_any	varchar(50)	YES		NULL	
Current_Managing_Director	varchar(40)	YES		NULL	

```
11 rows in set (0.09 sec)
```

```
mysql> desc prvt;
```

Field	Type	Null	Key	Default	Extra
S_No	int(11)	NO	PRI	NULL	
Name	varchar(30)	YES	UNI	NULL	
Founded_in	date	YES		NULL	
Founded_by	varchar(25)	YES		NULL	
Current_CEO	varchar(25)	YES		NULL	
Headquarters_Location	varchar(30)	YES		NULL	
Budget_Funding	double	YES		NULL	
Launcher_Name	varchar(70)	YES		NULL	
SubOrbital_Aircraft_Name_if_any	varchar(70)	YES		NULL	

```
9 rows in set (0.04 sec)
```

FUNCTIONS AND MODULES

Functions:

- digit1()
- spchar1()
- checkauth1()
- addauth()
- checkauth2()
- viewdatagovt()
- viewdataprvt()

Modules

- import mysql.connector

CODE

#Imports and setup

```
import mysql.connector
```

```
mydb=mysql.connector.connect(host="localhost",user="root",passwd="harsh123",database="csproject")
```

```
# charset="utf8"
```

```
curs=mydb.cursor()
```

```
def digit1(st): #returns true if string contains digit
```

```
    k=0
```

```
    for i in st:
```

```
        if i.isdigit():
```

```
            k=1
```

```
    if k==1:
```

```
        return True
```

```
    else:
```

```
        return False
```

```
def spchar1(st): #returns true if string contains special character
```

```
    k=0
```

```
    for i in st:
```

```
        if not(i.isdigit() or i.isalpha()):
```

```

        k=1
    if k==1:
        return True
    else:
        return False

def checkauth1(): #checks whether person is authorised or not
    import csv
    f=open('authorise.csv','r')
    h=csv.reader(f)
    authrec=[]
    for j in h:
        if len(j)==4:
            authrec.append(j)
    v=0
    while v<3:
        usID = input("Enter User ID: ")
        pwd = input("Enter password: ")
        k=0
        for i in authrec:
            if i[1] == usID:
                if i[2] == pwd:
                    print("Good to go! You are verified as an authorised user.")

```

```

        return True

    break

else:

    print("Wrong password. Try again.")

    k=1

if k==0:

    print("Wrong UserID")

v+=1

if v==3:

    print("3 attempts crossed. Have you forgot your credentials?")

    print("Move to the authorisation portal please. Enter 5")


def addauth(): #application for being an authorised user

    print("\n")

    import csv

    print("For creating new account:")

    print("1. enter your name")

    print("2. enter userID (must have no relation with your name and should keep
you anonymous) and it must be unique.")

    print("3. enter password with following conditions: ")

    print("""3.a -- at least 8 characters

```

3.b -- at least 1 special character

3.c -- at least 1 digit")

```
print("4. enter your e-mail ID")
```

```
h=open('authorise.csv','r')
```

```
k=open('applicants.csv','a')
```

```
m=csv.reader(h)
```

```
n=csv.writer(k)
```

```
authrec = []
```

```
for i in m:
```

```
    if len(i)==4:
```

```
        authrec.append(i[1])
```

```
h.close()
```

```
print("\n")
```

```
nm = input('enter name: ')
```

```
while True:
```

```
    usID = input('enter userid: ')
```

```
    if usID in authrec:
```

```
        print("repeated UserID not allowed")
```

```
    else:
```

```

        break
while True:
    pwd=input("enter password: ")
    if len(pwd)>8:
        if digit1(pwd):
            if spchar1(pwd):
                break
            else:
                print("at least 1 special character should be there")
        else:
            print("at least 1 digit should be there")
    else:
        print("at least 8 characters should be there")
while True:
    eml = input("Enter e-mail ID: ")
    if eml.endswith('@gmail.com'):
        break
    else:
        print("e-mail ID must end with \' @gmail.com \'... Try again")

if usID not in authrec:
    n.writerow([nm,usID,pwd,eml])

```



```

k.close()

print("Thank you for using the Authorisation Portal.")

print("Our admin will soon consider you to be an authorised user. Then you
may use choices 2,3 and 4")

def checkauth2(): #verification of an authorised user

    global AUTH

    AUTH = 0

    print("\n")

    print("ONLY AUTHORISED USERS CAN ADD/CHANGE/DELETE DATA")

    cha1 = input("Are you an authorised user (yes/no)? : ")

    if cha1.lower() == 'yes':

        if checkauth1():

            print("Ok. You may continue")

            print("\n")

        else:

            AUTH = 1

    else:

        print("\n")

        print("Press 5 to go to the AUTHORISATION PORTAL.")

        print("OR")

        print("You can also e-mail us your information on the following e-mail IDs:
")

```

```

import csv

f=open('authorise.csv','r')

cr = csv.reader(f)

for i in cr:

    if len(i)==4:

        print(i[3])

AUTH = 1


def viewdatagovt(lst):

    for i in lst:

        print("\n")


print("~~~~~")

print("Country: ",i[1])

print("Name of the Agency: ",i[2])

print("Acronym: ",i[3])

print("Date of Foundation: ",i[4])

print("Launch Capability: ",i[5])

print("Human Spaceflight: ",i[6])

print("Extraterrestrial Landing Capability: ",i[7])

print("Budget: ",i[8],'million USD')

print("Space Station (if any): ",i[9])

```

```

        print("Current Managing Director: ",i[10])

print("~~~~~")

def viewdataprvt(lst):

    for i in lst:

        print("\n")

print("~~~~~")

        print("Name of the Agency: ",i[1])
        print("Date of Foundation: ",i[2])
        print("Name of the Founder: ",i[3])
        print("Name of the current CEO: ",i[4])
        print("Location of Headquarters: ",i[5])
        print("Budget backed by stakeholders: ",i[6],'million USD')
        print("Name of the Launcher(/s) : ",i[7])
        print("Name of sub-orbital/orbital aircraft: ",i[8])

print("~~~~~")

```

#Intro

```
print("\t")
```

```
print('Hello everyone !!')
```

```
print("We all know that the space beyond the horizon of earth is a place full of mysteries.")
```

```
print("Now when we were small kids most of us would want to know more about it.")
```

```
print("Luckily, there are many space agencies in the world, both public and private, whose only job is to keep researching on what lies beyond.")
```

```
print("They employ the most intelligent people on the planet who work hard day and night to find and learn new things which amaze humanity.")
```

```
print("However, many of us are not aware of the recent updates or backgrounds of even the most largest space agencies in the world.")
```

```
print("So, I have taken the initiative to organise data from various sources and bring it under one roof in a user friendly format.")
```

```
print("So that you face no inconvenience (=_^=_)")
```

```
print("So, Let's start: ")
```

```
while True:
```

```
    print("\n")
```

```
    print('""What do you want to?:
```

```
        1. View data  2. Add data  3. Change/Update Data  4. Delete Data  5. Add  
authorisation  6. Exit Program ""')
```

```
    chmain=input("Press a number between 1 to 5 according to your need: ")
```

```

if chmain=='1': #display data

    print("\n")

    ch1=input("Which database do you want to access:

                1.Government  2.Private

            Enter choice: ")

    if ch1=='1':    #access govt database

        print("\n")

        chg1=input("How do you want to search the record:

                    1. By Name   2. By Acronym  3. By Country

                Enter choice: ")

        if chg1=='1':    #By Name

            k=0

            nm=input("enter name of the agency: ")

            curs.execute("SELECT * FROM govt WHERE Name ='{}'.format(nm))

            abc=curs.fetchall()

            if abc==[]:

                k=2

            else:

                viewdatagovt(abc)

            k=1

```

```
elif chg1=='2':    #By Acronym
```

```
    k=0
```

```
    acr=input("enter acronym of the agency: ")
```

```
    curs.execute("SELECT * FROM govt WHERE Acronym ='{}'.format(acr))
```

```
    abc=curs.fetchall()
```

```
    if abc==[]:
```

```
        k=2
```

```
    else:
```

```
        viewdatagovt(abc)
```

```
        k=1
```

```
elif chg1=='3':    #By Country
```

```
    k=0
```

```
    cntry=input("enter the country to which agency belongs to: ")
```

```
    curs.execute("SELECT * FROM govt WHERE Country='{}'.format(cntry))
```

```
    abc=curs.fetchall()
```

```
    if abc==[]:
```

```
        k=2
```

```
    else:
```

```
        viewdatagovt(abc)
```

```
        k=1
```

else:

print("Sorry only 3 parameters (Name, Acronym, Country), So press either 1,2 or 3")

if k==1:

print("\n")

print("So lets move on!")

elif k==2:

print("\n")

print("Sorry we do not have information regarding this currently in our database :-(")

print("But if you want to you can provide us information regarding this in the DATA INPUT/CHANGE/DELETE PORTAL (choices 2,3 and 4 respectively)")

if ch1=='2': *#access prvt database*

print("\n")

chp1=input("How do you want to search the record:

1. By Name 2. By Headquarters location

Enter choice: ")

if chp1=='1': *#By Name*

t=0

nm=input("enter name of the agency: ")

```

    curs.execute("SELECT * FROM prvt WHERE Name = '{}'.format(nm))

    abc=curs.fetchall()

    if abc==[]:

        t=2

    else:

        viewdataprvt(abc)

        t=1


elif chp1=='2': #By HQ location

    t=0

    hqloc=input("enter location of headquarters: ")

    curs.execute("SELECT * FROM prvt WHERE Headquarters_Location
    ='{}'.format(hqloc))

    abc=curs.fetchall()

    if abc==[]:

        t=2

    else:

        viewdataprvt(abc)

        t=1


else:

    print("Sorry only 2 parameters (Name, Headquarters Location), So press
    either 1 or 2")

```



```

if t==1:
    print("\n")
    print("So lets move on!")
elif t==2:
    print("Sorry we do not have information regarding this currently in our
database :-( ")
    print("But if you want to you can provide us information regarding this in
the DATA INPUT/CHANGE/DELETE PORTAL (choices 2,3 and 4 respectively)")

if chmain=='2': #adding data

    checkauth2() #Moves further only if person is authorised
    if AUTH == 1:
        continue

    ch2 = input("Which type of record do you wish to add:
                1.Government 2.Private
                Enter choice: ")
    if ch2 == '1':
        i=0
        while True:
            sno=int(input("enter Sno: "))

```

```

cntry=input("enter name of the country: ")
nm=input("enter the name of the agency: ")
acr=input("enter the acronym used for the space agency: ")
fndin=input("enter the date of foundation of the agency: ")
Lcap=input("does the given agency have Launch capability: ")
Hspfl=input("has the agency ever conducted a Human Space flight: ")
ELC=input("does the given agency have Extraterrestrial Landing
capability: ")
bgt=float(input("enter the budget assigned to the agency per annum:
"))

spstat=input("enter Name of space station(if any): ")
cmd=input("enter the name of the current managing director: ")

curs.execute("INSERT INTO govt
values({}, '{}', '{}', '{}', '{}', '{}', '{}', '{}', '{}', '{}', '{}')".format(sno,cntry,nm,acr,fndin,Lcap,Hsp
fl,ELC,bgt,spstat,cmd))

mydb.commit()

i+=1

print("\n")

ch=input("do you want to add more?")

if ch=='no':

    print(i,"records inserted")

    break

if ch2 == '2':

```

```

j=0
while True:
    sno=int(input("enter sno: "))
    nm=input("enter name: ")
    fndin=input("enter the date of foundation of the agency: ")
    fndby=input("enter the name of the founder of the agency: ")
    ceo=input("enter the name of the current CEO of the agency: ")
    hq=input("enter location(country) of headquarters: ")
    bgt=float(input("enter the Funds backed by stakeholders(in million
USD): "))
    Inchr=input("enter name of launcher: ")
    subair=input("enter name of suborbital aircraft(if any): ")
    curs.execute("INSERT INTO prvt
values({}, {}, {}, {}, {}, {}, {}, {}, {})".format(sno,nm,fndin,fndby,ceo,hq,bgt,Inchr,s
ubair))
    mydb.commit()
    j+=1
    print("\n")
    ch=input("do you want to add more?")
    if ch=='no':
        print(j,"records inserted")
        break

if chmain == '3': #update data

```

```
checkauth2() #Moves further only if user is authorised
```

```
if AUTH == 1:
```

```
    continue
```

```
ch3 = input("Which type of record do you wish to alter:
```

```
        1.Government  2.Private
```

```
        Enter choice: ")
```

```
if ch3 == '1':
```

```
    print("\n")
```

```
    chg1=input("Specify the record which you want to change in one of the  
following ways:
```

```
        1. By Name   2. By Acronym
```

```
        Enter choice: ")
```

```
if chg1=='1':          #By Name
```

```
    k=0
```

```
    nm=input("enter name of the agency: ")
```

```
    curs.execute("SELECT * FROM govt WHERE Name = '{}'.format(nm))
```

```
    abc=curs.fetchall()
```

```
    if abc == []:
```

```
        print("Sorry No Such data found try again")
```

```
    else:
```

```
        print("\n")
```

```

print("Now please enter the correct data: ")

a1=input("Launch Capability: ")
a2=input("Human Spaceflight: ")
a3=input("Extraterrestrial Landing Capability: ")
a4=input("Budget: ")
a5=input("Space Station (if any): ")
a6=input("Current Managing Director: ")

curs.execute('UPDATE govt set Launch_Capability="{",
Human_Spaceflight="{", Extraterrestrial_Landing_Capability="{",
Budget_MillionUSD={}, Space_Station_Name_if_any = "{",
Current_Managing_Director = "{", where
Name="{",'.format(a1,a2,a3,a4,a5,a6,nm))

mydb.commit()

print(curs.rowcount,"RECORD UPDATED")

k=1

```

```

elif chg1=='2':          #By Acronym

k=0

acr=input("enter acronym of the agency: ")

curs.execute("SELECT * FROM govt WHERE Acronym ='{}".format(acr))

abc=curs.fetchall()

if abc == []:

```

```

        print("Sorry No Such data found try again")
    else:
        print("\n")
        print("Now please enter the correct data: ")
        a1=input("Launch Capability: ")
        a2=input("Human Spaceflight: ")
        a3=input("Extraterrestrial Landing Capability: ")
        a4=input("Budget: ")
        a5=input("Space Station (if any): ")
        a6=input("Current Managing Director: ")

        curs.execute('UPDATE govt set Launch_Capability="{",
Human_Spaceflight="{", Extraterrestrial_Landing_Capability="{",
Budget_MillionUSD={}, Space_Station_Name_if_any = "{",
Current_Managing_Director = "{", where
Acronym="{",'.format(a1,a2,a3,a4,a5,a6,acr))

        mydb.commit()

        print(curs.rowcount,"RECORD UPDATED")

        k=1

    else:

        print("Sorry only 2 parameters (Name, Acronym), So press either 1 or 2")

    if k==1:

        print("So lets move on!")

```

```

if ch3=='2':

    print("\n")

    chp1=input("'Specify the record which you want to change in one of the
following ways:

            1. By Name    2. By Founder Name

            Enter choice: '")

    if chp1=='1':

        k=0

        nm=input("enter name of the agency: ")

        curs.execute("SELECT * FROM prvt WHERE Name = '{}".format(nm))

        abc=curs.fetchall()

        if abc == []:

            print("Sorry No Such data found try again")

        else:

            print("\n")

            print("Now please enter the correct data: ")

            a1=input("Current CEO: ")

            a2=input("Location of HeadQuarters: ")

            a3=input("Budget: ")

            a4=input("Name of the Launcher: ")

            a5=input("SubOrbital Aircraft Name (if any): ")

```

```
        curs.execute('UPDATE prvt set Current_CEO = "{}",
Headquarters_Location={}, Budget_Funding={}, Launcher_Name = "{}",
SubOrbital_Aircraft_Name_if_any = "{}" where
Name="{}".format(a1,a2,a3,a4,a5,nm))
```

```
        mydb.commit()
```

```
        print(curs.rowcount,"RECORD UPDATED")
```

```
        k=1
```

```
elif chp1=='2':
```

```
    k=0
```

```
    nm=input("enter name of the founder: ")
```

```
    curs.execute("SELECT * FROM prvt WHERE Founded_by =
'{}'.format(nm))
```

```
    abc=curs.fetchall()
```

```
    if abc == []:
```

```
        print("Sorry No Such data found try again")
```

```
    else:
```

```
        print("\n")
```

```
        print("Now please enter the correct data: ")
```

```
        a1=input("Current CEO: ")
```

```
        a2=input("Location of HeadQuarters: ")
```

```
        a3=input("Budget: ")
```

```
        a4=input("Name of the Launcher: ")
```

```
        a5=input("SubOrbital Aircraft Name (if any): ")
```



```
        curs.execute('UPDATE prvt set Current_CEO = "{}",  
Headquarters_Location={}, Budget_Funding={}, Launcher_Name = {},  
SubOrbital_Aircraft_Name_if_any = {}' where  
Founded_by="{}".format(a1,a2,a3,a4,a5,nm))
```

```
        mydb.commit()
```

```
        print(curs.rowcount,"RECORD UPDATED")
```

```
        k=1
```

```
    else:
```

```
        print("Sorry only 2 parameters (Name, Founder Name), So press either 1 or  
2")
```

```
    if k==1:
```

```
        print("So lets move on!")
```

```
if chmain == '4': #delete data
```

```
    checkauth2()
```

```
    if AUTH == 1:
```

```
        continue
```

```
    ch4=input("Which type of record do you wish to delete:
```

```
        1.Government 2.Private
```

```
        Enter choice: ")
```

```

if ch4=='1':

    print("\n")

    chg1=input("Specify the record which you want to delete in one of the
following ways:

                1. By Name   2. By Acronym

    Enter choice: ")

if chg1=='1':          #By Name

    k=0

    nm=input("enter name of the agency: ")

    curs.execute("SELECT * FROM govt WHERE Name = '{}'.format(nm))

    abc=curs.fetchall()

    if abc == []:

        print("Sorry No Such data found try again")

    else:

        curs.execute("DELETE FROM govt WHERE Name = '{}'.format(nm))

        mydb.commit()

        print(curs.rowcount,"RECORD DELETED")

        k=1


elif chg1=='2':          #By Acronym

    k=0

    nm=input("enter name of the agency: ")

    curs.execute("SELECT * FROM govt WHERE Acronym = '{}'.format(acr))

```

```

abc=curs.fetchall()

if abc == []:

    print("Sorry No Such data found try again")

else:

    curs.execute("DELETE FROM govt WHERE Acronym = '{}'.format(acr))

    mydb.commit()

    print(curs.rowcount,"RECORD DELETED")

    k=1


else:

    print("Sorry only 2 parameters (Name, Acronym), So press either 1 or 2")


if k==1:

    print("So lets move on!")


if ch4=='2':

    print("\n")

    chp1=input("Specify the record which you want to change in one of the
following ways:

                1. By Name   2. By Founder Name

Enter choice: ")

if chp1=='1':

    k=0

```

```

nm=input("enter name of the agency: ")
curs.execute("SELECT * FROM prvt WHERE Name = '{}'.format(nm))
abc=curs.fetchall()
if abc == []:
    print("Sorry No Such data found try again")
else:
    curs.execute("DELETE FROM prvt WHERE Name = '{}'.format(nm))
    mydb.commit()
    print(curs.rowcount,"RECORD DELETED")
    k=1

elif chp1=='2':
    k=0
    nm=input("enter name of the founder: ")
    curs.execute("SELECT * FROM prvt WHERE Founded_by =
'{}'.format(nm))
    abc=curs.fetchall()
    if abc == []:
        print("Sorry No Such data found try again")
    else:
        curs.execute("DELETE FROM prvt WHERE Founded_by =
'{}'.format(nm))

```

```
        mydb.commit()

        print(curs.rowcount,"RECORD DELETED")

        k=1

    else:

        print("Sorry only 2 parameters (Name, Founder Name), So press either 1 or 2")

    if k==1:

        print("So lets move on!")

    if chmain=='5':

        addauth()

    if chmain=='6':

        print("Thank You")

        break
```

OUTPUT

RESTART: C:\Users\haayu\AppData\Local\Programs\Python\Python37-32\cs project.py

Hello everyone !!

We all know that the space beyond the horizon of earth is a place full of mysteries.

Now when we were small kids most of us would want to know more about it.

Luckily, there are many space agencies in the world, both public and private, whose only job is to keep researching on what lies beyond.

They employ the most intelligent people on the planet who work hard day and night to find and learn new things which amaze humanity.

However, many of us are not aware of the recent updates or backgrounds of even the most largest space agencies in the world.

So, I have taken the initiative to organise data from various sources and bring it under one roof in a user friendly format.

So that you face no inconvenience (=^_ ^=)

So, Let's start:

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 1

Which database do you want to access:

1.Government 2.Private

Enter choice: 1

How do you want to search the record:

1. By Name 2. By Acronym 3. By Country

Enter choice: 2

enter acronym of the agency: ISRO

Country: India

Name of the Agency: Indian Space Research Organisation

Acronym: ISRO

Date of Foundation: 1969-08-15

Launch Capability: YES

Human Spaceflight: YES

Extraterrestrial Landing Capability: NO

Budget: 2000.0 million USD

Space Station (if any): NO

Current Managing Director: S. Somanath

Ac
Go

```
What do you want to?:
    1. View data   2. Add data   3. Change/Update Data   4. Delete Data   5. Add authorisation   6. Exit Program
Press a number between 1 to 5 according to your need: 1
```

```
What do you want to?:
    1. View data   2. Add data   3. Change/Update Data   4. Delete Data   5. Add authorisation   6. Exit Program
Press a number between 1 to 5 according to your need: 1
```

```
What do you want to?:
    1. View data   2. Add data   3. Change/Update Data   4. Delete Data   5. Add authorisation   6. Exit Program
Press a number between 1 to 5 according to your need: 1
```

```
Which database do you want to access:
      1.Government  2.Private
Enter choice: 2
```

```
Which database do you want to access:
      1.Government  2.Private
Enter choice: 2
```

```
Which database do you want to access:
      1.Government  2.Private
Enter choice: 2
```

```
How do you want to search the record:
    1. By Name      2. By Headquarters location
Enter choice: 1
```

```
How do you want to search the record:
    1. By Name      2. By Headquarters location
Enter choice: 1
```

```
How do you want to search the record:
    1. By Name      2. By Headquarters location
Enter choice: 1
```

```
How do you want to search the record:
    1. By Name      2. By Headquarters location
Enter choice: 1
enter name of the agency: SpaceX
```

Name of the Agency: SpaceX
Date of Foundation: 2002-05-06
Name of the Founder: Elon Musk
Name of the current CEO: Elon Musk
Location of Headquarters: United States
Budget backed by stakeholders: 3000.0 million USD
Name of the Launcher(/s) : Falcon Series (1,le,5,9,Heavy), Starship Super-Heavy
Name of sub-orbital/orbital aircraft: Dragon 2, Starship

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Date of Foundation: 2002-05-06
Name of the Founder: Elon Musk
Name of the current CEO: Elon Musk
Location of Headquarters: United States
Budget backed by stakeholders: 3000.0 million USD
Name of the Launcher(s) : Falcon Series (1,le,5,9,Heavy), Starship Super-Heavy
Name of sub-orbital/orbital aircraft: Dragon 2, Starship

So lets move on!

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 2

ONLY AUTHORISED USERS CAN ADD/CHANGE/DELETE DATA

Are you an authorised user (yes/no)? : yes

Enter User ID: asdf

Enter password: pwd

Wrong UserID

Enter User ID: UserID

Enter password: pwd

Wrong password. Try again.

Enter User ID: UserID

Enter password: Password@123

Good to go! You are verified as an authorised user.

Ok. You may continue

Which type of record do you wish to add:

1.Government 2.Private

Enter choice: 1

enter Sno: 19

enter name of the country: Iran

enter the name of the agency: Iranian Space Agency

enter the acronym used for the space agency: ISA

enter the date of foundation of the agency: 2004-02-01

does the given agency have Launch capability: YES

has the agency ever conducted a Human Space flight: NO

does the given agency have Extraterrestrial Landing capability: NO

enter the budget assigned to the agency per annum: 4.6

enter Name of space station(if any): NO

enter the name of the current managing director: Hamid Fazeli

do you want to add more?no

1 records inserted

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 3

ONLY AUTHORISED USERS CAN ADD/CHANGE/DELETE DATA

Are you an authorised user (yes/no)? : yes

Enter User ID: UserID

Enter password: Password@123

Good to go! You are verified as an authorised user.

Ok. You may continue

Which type of record do you wish to alter:

1.Government 2.Private

Enter choice: 1

Specify the record which you want to change in one of the following ways:

1. By Name 2. By Acronym

Enter choice: 2

enter acronym of the agency: ISA

Now please enter the correct data:

Launch Capability: YES

Human Spaceflight: YES

Extraterrestrial Landing Capability: NO

Budget: 9

Space Station (if any): NO

Current Managing Director: Mohammad Ali Forghani

2 RECORD UPDATED

So lets move on!

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 4

ONLY AUTHORISED USERS CAN ADD/CHANGE/DELETE DATA

Are you an authorised user (yes/no)?: yes

Enter User ID: UserID

Enter password: Password@123

Good to go! You are verified as an authorised user.

Ok. You may continue

Which type of record do you wish to delete:

1.Government 2.Private

Enter choice: 1

Specify the record which you want to delete in one of the following ways:

1. By Name 2. By Acronym

Enter choice: 1

enter name of the agency: Iranian Space Agency

1 RECORD DELETED

So lets move on!

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 5

For creating new account:

1. enter your name

2. enter userID (must have no relation with your name and should keep you anonymous) and it must be unique.

3. enter password with following conditions:

3.a -- at least 8 characters

3.b -- at least 1 special character

3.c -- at least 1 digit

4. enter your e-mail ID

enter name: Harsh

enter userid: SGScspract

enter password: StGS@123

at least 8 characters should be there

enter password: StGrSc@123

Enter e-mail ID: Harsh@123

e-mail ID must end with ' @gmail.com '... Try again

Enter e-mail ID: Harsh@gmail.com

Thank you for using the Authorisation Portal.

Our admin will soon consider you to be an authorised user. Then you may use choices 2,3 and 4

What do you want to?:

1. View data 2. Add data 3. Change/Update Data 4. Delete Data 5. Add authorisation 6. Exit Program

Press a number between 1 to 5 according to your need: 6

Thank You

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(Eg: <https://www.isro.gov.in> ,<https://www.nasa.gov>)