1. Write a python program to find the longest word in a given sentence.

In [19]:

```
#dataset
text = "Hello, My name is Preyash Patel"

#split into words
words_list = text.split(' ')

#defing variables
MAX = 0
word = ""

#forloop to find the longest word
for i in words_list:
    if len(i) > MAX:
        MAX = len(i)
        word = i
#printing teh longest word
print("Longest Word is",word)
```

```
Longest Word is Preyash
```

2. Write a python program to find the sum of all numbers in a list

In [26]:

```
dataset = [20,25,68,9,5,8,46,9,5,3,6,3,65,4]
SUM = 0
for i in dataset: SUM = SUM + i
print(f"Sum of {dataset} is {SUM}.")
```

```
Sum of [20, 25, 68, 9, 5, 8, 46, 9, 5, 3, 6, 3, 65, 4] is 276.
```

3. Write a python program to print website suffixes (com , org , net ,in) from this list

In [29]:

```
website = input("Enter Website Address")
print("Domain Name is", str(website.split(".")[-1]))
```

```
Enter Website Addresswww.gmail.com
Domain Name is com
```

4. Write a python program to sort a given list of numbers without using sort() function

In [46]:

```
dataset = [0,8,6,9,55,3,9,4,5,3,5,9,6,97,20,6,25]
print(f"List: {dataset}")

#loop to sort list
sorted_dataset = []
for i in range(len(dataset)):
    sorted_dataset.append(min(dataset))
    dataset.remove(min(dataset))

print(f"Sorted List: {sorted_dataset}")
```

```
List: [0, 8, 6, 9, 55, 3, 9, 4, 5, 3, 5, 9, 6, 97, 20, 6, 25]
Sorted List: [0, 3, 3, 4, 5, 5, 6, 6, 6, 8, 9, 9, 9, 20, 25, 55, 97]
```

5. Write a python program to convert hours into seconds.

In [52]:

```
def ToSeconds(hour):
    return hour*60*60

print(f"5 Hour = {ToSeconds(5)} Seconds")
```

```
5 Hour = 18000 Seconds
```

6. Write a python program to count the number of alphabets and digits, uppercase letters, lowercase letter, spaces and other characters in the string entered.

In [78]:

```
#dataset
text = "6. Write a Python program to Count the number of alphabets and digits, u
ppercase letters, lowercase letter, spaces and other characters in the string en
tered."

#converting text into the characters
splited_text = list(text)

#defing required list
alpha =  []
digit = []
upperCase = []
loverCase = []
space = []
otherChar = []

#forloop to append
for i in splited_text:
    if i.isalpha(): alpha.append(i)
    elif i.isdigit(): digit.append(i)
    elif i.isupper(): upperCase.append(i)
    elif i.islower(): loverCase.append(i)
    elif i.isspace(): space.append(i)
    else: otherChar.append(i)

#print final output
output = f"""Text is {text}\n
No of Alphabet: {len(alpha)}\n
No of Digits: {len(digit)}\n
No of Upper Case Characters: {len(upperCase)}\n
No of Lover Case Characters: {len(loverCase)}\n
No of Space: {len(space)}\n
No of Other Characters: {len(otherChar)}
"""
print(output)
```

```
Text is 6. Write a Python program to Count the number of alphabets a
nd digits, uppercase letters, lowercase letter, spaces and other cha
racters in the string entered.

No of Alphabet: 128

No of Digits: 1

No of Upper Case Characters: 0

No of Lover Case Characters: 0

No of Space: 24

No of Other Characters: 5
```

7. Write a python program to accept a string (a sentence) and returns a string having the first letter of each word in the capital letter.

In [88]:

```
#dataset
text = "6. Write a Python program to Count the number of alphabets and digits, u
ppercase letters, lowercase letter, spaces and other characters in the string en
tered."

#converting text into the characters
splited_text = text.split()

#defing required list
output_text = ""

#forloop to append
for i in splited_text:
    output_text = output_text + " " +i.capitalize()

#print final output
print(f"Orignal Text: {text}\n{'*'*114}\nUpdated Text: {output_text}")
```

```
Text is 6. Write a Python program to Count the number of alphabets a
nd digits, uppercase letters, lowercase letter, spaces and other cha
racters in the string entered.
**********************************************************************
**********************************************
Updated Text:  6. Write A Python Program To Count The Number Of Alph
abets And Digits, Uppercase Letters, Lowercase Letter, Spaces And Ot
her Characters In The String Entered.
```

8. Write a python program to shift the negative number to left and the positive numbers to right so that the resulting list will look like.

Original list [-12, 11, -13, -5, 6, -7, 5, -3, -6]

Output should be [11, 6, 5, -6, -3, -7, -5, -13, -12]

In [104]:

```
dataset = [-12, 11, -13, -5, 6, -7, 5, -3, -6]
print(f"Orignal List: {dataset}")
posetive = []
negative = []
#loop to sort list
for i in dataset:
    if i <= 0:
        negative.append(i)
    else:
        posetive.append(i)
print(f"Sorted List: {posetive + negative}")
```

```
Orignal List: [-12, 11, -13, -5, 6, -7, 5, -3, -6]
Sorted List: [11, 6, 5, -12, -13, -5, -7, -3, -6]
```

9. Write a Python program to input names of ‘n’ countries and their capital and currency, store it in a dictionary and display in tabular form. Also search and display for a particular country.

In [352]:

```
class CountryData:
    #defing required variable
    NoOfCountries = {}
    ID = 0

    #funbction to Add data
    def AddCountry(self):
        CountryData.ID = CountryData.ID + 1
        countrie = {}
        countrie["Name"] = input("Enter Country Name: ")
        countrie["Capital"] = input("Enter Country's Capital Name: ")
        countrie["Currency"] = input("Enter Country's Currency: ")
        CountryData.NoOfCountries[CountryData.ID] = countrie

    #function to design output
    def design(x):
        halfSize = int((19 - len(x))/2)
        return ("|"+(" "*halfSize)+ x + (" "*halfSize) +"|")

    def designHeading():
        print(design("ID")+design("Country Name")+design("Capital")+design("Curr
ency"))

    #display all
    def Report(self):
        designHeading()
        for i in CountryData.NoOfCountries:
            print(design(str(i)),end="")
            for j in CountryData.NoOfCountries[i]:
                print(design(CountryData.NoOfCountries[i][j]) , end="")
            print()

    #funcion to find details
    def searchCountry(self):
        Search = input("Enter Country name: ")
        for i in CountryData.NoOfCountries:
            if CountryData.NoOfCountries[i]["Name"] == Search:
                designHeading()
                print(design(str(i)),end="")
                for j in CountryData.NoOfCountries[i]:
                    print(design(CountryData.NoOfCountries[i][j]) , end="")
```

In [353]:

```
obj = CountryData()
obj.AddCountry()
obj.AddCountry()
obj.AddCountry()
obj.Report()
obj.searchCountry()
```

```
Enter Country Name: India
Enter Country's Capital Name: Gandhinagar
Enter Country's Currency: INR
Enter Country Name: Pakistan
Enter Country's Capital Name: Islamabad
Enter Country's Currency: Pakasting Ruppy
Enter Country Name: China
Enter Country's Capital Name: Beiging
Enter Country's Currency: yurn
|        ID        ||   Country Name   ||      Capital      ||     C
urrency     |
|         1         ||       India       ||    Gandhinagar    ||
INR        |
|         2         ||     Pakistan     ||     Islamabad     ||  Pak
asting Ruppy  |
|         3         ||       China       ||      Beiging      ||
yurn       |
Enter Country name: China
|        ID        ||   Country Name   ||      Capital      ||     C
urrency     |
|         3         ||       China       ||      Beiging      ||
yurn       |
```

10. Write a python program to find the maximum difference in the list of integers.

In [354]:

```
dataset = [22,26,98,336,9,456,230,22,366,26,95,892,65,26,33,315,35]
print(f"Maximum Differance of {dataset} is {max(dataset)-min(dataset)}")
```

```
Maximum Differance of [22, 26, 98, 336, 9, 456, 230, 22, 366, 26, 9
5, 892, 65, 26, 33, 315, 35] is 883
```

11. Write a python program using an object oriented approach. (Use Exception handling)

1. Create a bank account by supplying a user id and password.
2. Login using their id and password.
3. Now if login was successful the user will be able to do the following:
    A. Withdraw money.
    B. Deposit money.
    C. Request balance.
    D. Quit the program.
4. Quit the program.

In [409]:

```
#!/usr/bin/env python3
# -*- coding: utf-8 -*-
"""
Created on Sat Feb 15 13:45:35 2020

@author: preyash
"""

#importing module
from datetime import datetime

class BankData:
    #data structure will be Account No, ID, Pass,BAlance
    Database = []
    DataIndex = 0

    def DesignBreak(self):
        print("-"*50)

    def __init__(self):
        #self.loginUserID = ""
        BankData.DataIndex = 99999
        BankData.DesignBreak(self)
        print("Welcome to MBank")

    #creating Account
    def CreateAccount(self):
        temp = []
        def EnterDetails(self):
            #defining account no
            now = datetime.now()
            temp.append(now.strftime("%Y%m%d%H%M%S"))
            print(f"Account No is: {temp[0]}")
            print("Create Login Credintial")
            temp.append(input("User ID:"))
            temp.append(input("Password:"))
            temp.append(0)
            print()
        EnterDetails(self)
        print("Details Varification")
        print(f"Account No: {temp[0]}\nUser ID: {temp[1]}\nPassword: {temp[2]}\n
Balance: {temp[3]}")
        Confirm = input("Press Y to Confirm\nPress N to Reenter\nPress Q to Exit
\nEter your Selection: ").lower()
        if Confirm == "y": BankData.Database.append(temp)
        elif Confirm == "n": BankData.CreateAccount(self)

        else : print("Invalid Input")
        print("Thank you for Banking with us")
        BankData.DesignBreak(self)

    #login verification
    def LoginVerification(self):
        userID = input("User ID : ")
        userPass = input("Password : ")
        for i in range(len(BankData.Database)):
            if(userID == BankData.Database[i][1]):
                if(userPass == BankData.Database[i][2]):
                    #self.loginUserID = userID
```

```
                    BankData.DataIndex = i
                    print("Login Successful")
                    BankData.DesignBreak(self)
                    return True
        print("Login Credintail is wrong")
        return False

    #logout
    def Logout(self):
        BankData.DataIndex = 999
        #self.loginUserID = ""
        print("Logout Succesfull")

    #display details
    def DisplayDetails(self):
        print("your Account No is: " + str(BankData.Database[BankData.DataIndex]
[0]))
        print("your User ID is: " + str(BankData.Database[BankData.DataIndex][1
]))
        print("your Account Balance is: " + str(BankData.Database[BankData.DataI
ndex][3]))
        BankData.DesignBreak(self)

    #deposit method
    def Deposit(self):
        BankData.DisplayDetails(self)
        DepositAmount = float(input("Enter Amount to Deposit: "))
        BankData.Database[BankData.DataIndex][3] += DepositAmount
        print(f"Updated Balance is {BankData.Database[BankData.DataIndex][3]}")
        BankData.DesignBreak(self)

    #deposit method
    def Withdrow(self):
        BankData.DisplayDetails(self)
        WithdrowAmount = float(input("Enter Amount to Withdrow: "))
        BankData.Database[BankData.DataIndex][3] -= WithdrowAmount
        print(f"Updated Balance is {BankData.Database[BankData.DataIndex][3]}")
        BankData.DesignBreak(self)

try:
    #creating Object
    obj = BankData()
    #developing GUI
    option = 999
    subOption = 999
    while(option != 0):
        print("Chose your Option from the Following")
        print("1. Create Account\n2. Login\n0. Exit")
        try:
            option = int(input("Enter your Selection: "))
        except ValueError:
            print("Invalid Input")
            option = int(input("Enter your Selection: "))
        if option == 1:
            obj.CreateAccount()
        elif option == 2:
            if obj.LoginVerification():
                while(subOption != 0):
                    try:
                        subOption = int(input("1. Deposit Funds\n2. Withdrow Fun
ds\n3. Desplay Balance\n0. Logout\nEnter your Selection: "))
```

```
                    except ValueError:
                        print("Invalid Input")
                        subOption = int(input("1. Deposit Funds\n2. Withdrow Fun
ds\n3. Desplay Balance\n0. Logout\nEnter your Selection: "))
                    if subOption == 1:
                        obj.Deposit()
                    elif subOption == 2:
                        obj.Withdrow()
                    elif subOption == 3:
                        obj.DisplayDetails()
                    elif subOption == 0:
                        obj.Logout()
                        subOption = 999
                        break
                    else :
                        print("invalid Input")
        elif option == 0:
            break
        else :
            print("invalid Input")
finally:
    print("Thnak you for Banking with us")
```

```
--------------------------------------------------
Welcome to MBank
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: Preyash
Invalid Input
Enter your Selection: 1
Account No is: 20200215151843
Create Login Credintial
User ID:Preyahs
Password:preyash

Details Varification
Account No: 20200215151843
User ID: Preyahs
Password: preyash
Balance: 0
Press Y to Confirm
Press N to Reenter
Press Q to Exit
Eter your Selection: y
Thank you for Banking with us
--------------------------------------------------
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 1
Account No is: 20200215151854
Create Login Credintial
User ID:gopal
Password:gopal

Details Varification
Account No: 20200215151854
User ID: gopal
Password: gopal
Balance: 0
Press Y to Confirm
Press N to Reenter
Press Q to Exit
Eter your Selection: y
Thank you for Banking with us
--------------------------------------------------
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 2
User ID : gopal
Password : gopal
Login Successful
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 1
your Account No is: 20200215151854
```

```
your User ID is: gopal
your Account Balance is: 0
--------------------------------------------------
Enter Amount to Deposit: 105500
Updated Balance is 105500.0
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 2
your Account No is: 20200215151854
your User ID is: gopal
your Account Balance is: 105500.0
--------------------------------------------------
Enter Amount to Withdrow: 589.55
Updated Balance is 104910.45
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 3
your Account No is: 20200215151854
your User ID is: gopal
your Account Balance is: 104910.45
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 0
Logout Succesfull
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 2
User ID : Preyash
Password : preyash
Login Credintail is wrong
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 2
User ID : Preyash
Password : preyash
Login Credintail is wrong
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 2
User ID : Preyahs
Password : preyash
Login Successful
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
```

```
0. Logout
Enter your Selection: 1
your Account No is: 20200215151843
your User ID is: Preyahs
your Account Balance is: 0
--------------------------------------------------
Enter Amount to Deposit: 45698
Updated Balance is 45698.0
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 2
your Account No is: 20200215151843
your User ID is: Preyahs
your Account Balance is: 45698.0
--------------------------------------------------
Enter Amount to Withdrow: 598
Updated Balance is 45100.0
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 3
your Account No is: 20200215151843
your User ID is: Preyahs
your Account Balance is: 45100.0
--------------------------------------------------
1. Deposit Funds
2. Withdrow Funds
3. Desplay Balance
0. Logout
Enter your Selection: 0
Logout Succesfull
Chose your Option from the Following
1. Create Account
2. Login
0. Exit
Enter your Selection: 0
Thnak you for Banking with us
```

12. Write a python program using an object oriented approach. (Use Exception handling) Private members of class student

1. Admno - Integer
2. Sname - String
3. English, Maths, Science - float
4. Total - float
5. ctotal() - A function to calculate eng + math + science with float return type.
6. Public member function of class student
7. Takedata() - Function to accept values for admno, sname, eng, science and invoke ctotal() to calculate total.
8. Showdata() - Function to display all the data members on the screen.
9. Grade() -Student and display its grade accordingly.

In [395]:

```
class Student:
    #data structure will be AdmNo, Sname, M1, M2, M3, Total
    Database = []

    def DesignBreak(self):
        print("-"*50)

    def __init__(self):
        Student.DesignBreak(self)
        self.No = 0
        print("Welcome to School")

    #Adding new Student
    def Takedata(self):
        def CTotal(x,y,z): return x+y+z
        temp = []
        self.No += 1
        temp.append(self.No)
        print(f"Admission No is: {temp[0]}")
        temp.append(input("Student Name: "))
        temp.append(float(input("English Marks: ")))
        temp.append(float(input("Maths Marks: ")))
        temp.append(float(input("Science Marks: ")))
        temp.append(CTotal(temp[2], temp[3], temp[4]))
        Student.Database.append(temp)
        Student.DesignBreak(self)

    #display details
    def Showdata(self):
        Student.DesignBreak(self)
        for i in Student.Database:
            print(f"Student Admission No: {i[0]}")
            print(f"Student Name: {i[1]}")
            print(f"Student English Marks: {i[2]}")
            print(f"Student Maths Marks: {i[3]}")
            print(f"Student Science Marks: {i[3]}")
            print(f"Student Total Marks: {i[3]}")
            Student.DesignBreak(self)

    def Grade(self):
        Student.DesignBreak(self)
        for i in Student.Database:
            temp_grade = i[-1]/3
            if(temp_grade>90): print(f"{i[1]}'s grade is A")
            elif(temp_grade>80): print(f"{i[1]}'s grade is B")
            elif(temp_grade>65): print(f"{i[1]}'s grade is C")
            elif(temp_grade>45): print(f"{i[1]}'s grade is D")
            else: print(f"{i[1]}'s grade is F")
            Student.DesignBreak(self)

try:
    #creating Object
    obj = Student()
    #developing GUI
    option = 999
    while(option != 0):
        print("Chose your Option from the Following")
        print("1. Add Student\n2. Show Details\n3. Grade\n0. Exit")
        option = int(input("Enter your Selection: "))
```

```
        if option == 1:    obj.Takedata()
        elif option == 2:   obj.Showdata()
        elif option == 3:   obj.Grade()
        elif option == 0: break
        else :
            print("invalid Input")
            pass
finally:
    print("Have a good day")
```

```
--------------------------------------------------
Welcome to School
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 1
Admission No is: 1
Student Name: Preyash
English Marks: 88
Maths Marks: 89
Science Marks: 79
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 1
Admission No is: 2
Student Name: Nidhi
English Marks: 88
Maths Marks: 87
Science Marks: 69
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 1
Admission No is: 3
Student Name: Ketan
English Marks: 58
Maths Marks: 78
Science Marks: 68
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 1
Admission No is: 4
Student Name: Het
English Marks: 25
Maths Marks: 68
Science Marks: 98
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 2
--------------------------------------------------
Student Admission No: 1
Student Name: Preyash
Student English Marks: 88.0
Student Maths Marks: 89.0
```

```
Student Science Marks: 89.0
Student Total Marks: 89.0
--------------------------------------------------
Student Admission No: 2
Student Name: Nidhi
Student English Marks: 88.0
Student Maths Marks: 87.0
Student Science Marks: 87.0
Student Total Marks: 87.0
--------------------------------------------------
Student Admission No: 3
Student Name: Ketan
Student English Marks: 58.0
Student Maths Marks: 78.0
Student Science Marks: 78.0
Student Total Marks: 78.0
--------------------------------------------------
Student Admission No: 4
Student Name: Het
Student English Marks: 25.0
Student Maths Marks: 68.0
Student Science Marks: 68.0
Student Total Marks: 68.0
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 3
--------------------------------------------------
Preyash's grade is B
--------------------------------------------------
Nidhi's grade is B
--------------------------------------------------
Ketan's grade is C
--------------------------------------------------
Het's grade is D
--------------------------------------------------
Chose your Option from the Following
1. Add Student
2. Show Details
3. Grade
0. Exit
Enter your Selection: 0
Have a good day
```

13. Write a python program to create user defined function to read the content from a text myHobby.txt and display the following result.

1. Count the number of blank spaces
2. Count the number of alphabets present
3. Count the number of words starting with a vowel
4. Count the number of lines present
5. Number of numeric characters

In [396]:

```
#writing file
file = open("myHobby.txt","w")
text = """I have a lot of hobbies but the favorite one that I like most is playi
ng football.\nWhen I have free time, I love to play football. I’m a big fan of f
ootball since my childhood. I have been very well in this soccer game.\nWhen I j
ust entered in my school, my parents told the principal about my hobby.\nThe pri
ncipal replied that there is an opportunity to take part in sports even from cla
ss 1. So, they became so happy and admitted to me this school. So, I really enjo
y the football game and take part in my school competition."""
file.write(text)
file.close()

#reading file
file = open("myHobby.txt","r")
text = file.read()
file.close()

#converting text into the characters
splited_text = list(text)
splited_word = text.split()

#defing required list
alpha =  []
digit = []
space = []
starting_word_vowel = []
numberOfLine = text.count("\n")
vowel = ["a","e","i","o","u"]

#forloop to append
for i in splited_text:
    if i.isalpha(): alpha.append(i)
    elif i.isdigit(): digit.append(i)
    elif i.isspace(): space.append(i)

for i in splited_word:
    if i[0].isalpha() and len(i) > 2:
        for j in vowel:
            if i[0].lower() == j: starting_word_vowel.append(i)

#print final output
output = f"""Text is :\n{text}\n\n
No of Alphabet: {len(alpha)}
No of Digits: {len(digit)}
No of Space: {len(space)}
No of Starting Character as vowel: {len(starting_word_vowel)}
No of Number of line: {numberOfLine}
"""
print(output)
```

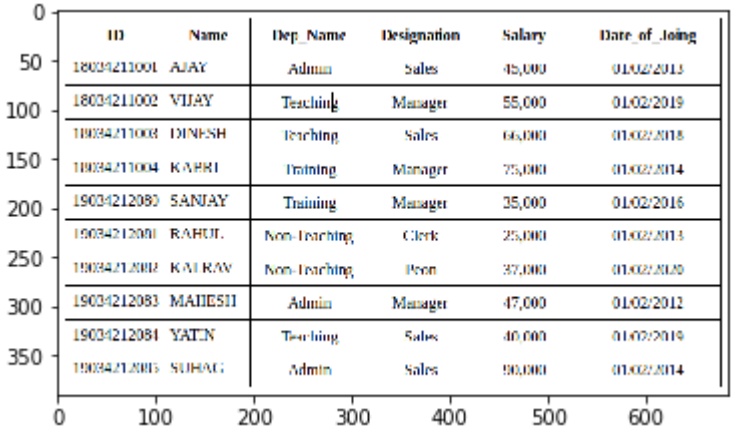
```
Text is :
I have a lot of hobbies but the favorite one that I like most is pla
ying football.
When I have free time, I love to play football. I’m a big fan of foo
tball since my childhood. I have been very well in this soccer game.
When I just entered in my school, my parents told the principal abou
t my hobby.
The principal replied that there is an opportunity to take part in s
ports even from class 1. So, they became so happy and admitted to me
this school. So, I really enjoy the football game and take part in m
y school competition.


No of Alphabet: 411
No of Digits: 1
No of Space: 101
No of Starting Character as vowel: 10
No of Number of line: 3
```

14. Consider the following tables: And perform the queries using python.(MySQL / SQL Server)

In [407]:

```
import matplotlib.pyplot as plt
import matplotlib.image as mpimg
img=mpimg.imread('/home/preyash/Pictures/Screenshot from 2020-02-15 12-46-26.png')
imgplot = plt.imshow(img)
plt.show()
```



1. Find all the Name’s whose salary is < Rs.35000
2. Find all the employees working with SALES Department and with designation MANAGER
3. Find all employees whose name starts with S.
4. Find total number of employees who work with Admin department
5. Find all the employees who joined after 1st January, 2016.
6. Count number of employees whose salary is between Rs.35000 and Rs.50000.
7. Sort the table by Date of Joining
8. Find the employees whose designation is Training and joined after 01/02/2014.
9. Find all the employees whose designation is Clerk
10. Count number of Manager in Teaching or Admin

In [440]:

```
#importing required module
import mysql.connector

#making connection
mydb = mysql.connector.connect(
        host="localhost",
        user='preyash',
        password='googlehome',
        database='pract14')

#creating objec for data
myCursor=mydb.cursor()
#print(myCursor.rowcount)

#q1
q1 = "select `Name` from `data` where `Salary` < 35000;"
myCursor.execute(q1)
print("a: all the Name's whose salary is < Rs.35000")
for i in myCursor: print(i)
print("-"*110)

#q2
q2 = "SELECT * FROM `data` WHERE 'Dep_Name' = 'Sales' and 'Designation' = 'Manag
er'"
myCursor.execute(q2)
print("b: Find all the employees working with SALES Department and with designat
ion MANAGER")
for i in myCursor: print(i)
print("-"*110)

#q3
q = "SELECT * FROM `data` WHERE `Name` LIKE 'S%'"
myCursor.execute(q)
print("c: Find all employees whose name starts with S.")
for i in myCursor: print(i)
print("-"*110)

#q4
q = "SELECT COUNT(`Name`) FROM `data` WHERE `Dep_Name` = 'Admin'"
myCursor.execute(q)
print("d: Find total number of employees who work with Admin department")
for i in myCursor: print(i)
print("-"*110)

#q5
q = "SELECT * FROM `data` WHERE `Date_of_Joing` > '01-01-2016'"
myCursor.execute(q)
print("e: Find all the employees who joined after 1st January, 2016.")
for i in myCursor: print(i)
print("-"*110)

#q6
q = "SELECT COUNT(`Name`) FROM `data` WHERE `Salary` BETWEEN 35000 and 50000"
myCursor.execute(q)
print("f: Count number of employees whose salary is between Rs.35000 and Rs.5000
0.")
for i in myCursor: print(i)
print("-"*110)
```

```
#q7
q = "SELECT * FROM `data` ORDER BY `Date_of_Joing`"
myCursor.execute(q)
print("g: Sort the table by Date of Joining")
for i in myCursor: print(i)
print("-"*110)

#q8
q = "SELECT * FROM `data` WHERE `Designation` = 'Training' AND `Date_of_Joing` >
'01-02-2014'"
myCursor.execute(q)
print("h: Find the employees whose designation is Training and joined after 01/0
2/2014.")
for i in myCursor: print(i)
print("-"*110)

#q9
q = "SELECT * FROM `data` WHERE `Designation` = 'Clerk'"
myCursor.execute(q)
print("i: Find all the employees whose designation is Clerk")
for i in myCursor: print(i)
print("-"*110)

#q10
q = "SELECT * FROM `data` WHERE `Designation` = 'Manager' AND `Dep_Name` IN('Adm
in' ,'Teaching')"
myCursor.execute(q)
print("j:  Count number of Manager  in Teaching or Admin")
for i in myCursor: print(i)
print("-"*110)
```

```
a: all the Name’s whose salary is < Rs.35000
('RAHUL',)
------------------------------------------------------------------------
----------------------------------------
b: Find all the employees working with SALES Department and with des
ignation MANAGER
------------------------------------------------------------------------
----------------------------------------
c: Find all employees whose name starts with S.
(19034212080, 'SANJAY', 'Training', 'Manager', 35000, datetime.date
(2016, 2, 1))
(19034212085, 'SUHAG', 'Admin', 'Sales', 90000, datetime.date(2014,
2, 1))
------------------------------------------------------------------------
----------------------------------------
d: Find total number of employees who work with Admin department
(3,)
------------------------------------------------------------------------
----------------------------------------
e: Find all the employees who joined after 1st January, 2016.
(18034211001, 'AJAY', 'Admin', 'Sales', 45000, datetime.date(2013,
2, 1))
(18034211002, 'VIJAY', 'Teaching', 'Manager', 55000, datetime.date(2
019, 2, 1))
(18034211003, 'DINESH', 'Teaching', 'Sales', 66000, datetime.date(20
18, 2, 1))
(18034211004, 'KABRI', 'Training', 'Manager', 75000, datetime.date(2
014, 2, 1))
(19034212080, 'SANJAY', 'Training', 'Manager', 35000, datetime.date
(2016, 2, 1))
(19034212081, 'RAHUL', 'Non-Teaching', 'Clerk', 25000, datetime.date
(2013, 2, 1))
(19034212082, 'KALRAV', 'Non-Teaching', 'Peon', 37000, datetime.date
(2020, 2, 1))
(19034212083, 'MAHESH', 'Admin', 'Manager', 47000, datetime.date(201
2, 2, 1))
(19034212084, 'YATIN', 'Teaching', 'Sales', 40000, datetime.date(201
9, 2, 1))
(19034212085, 'SUHAG', 'Admin', 'Sales', 90000, datetime.date(2014,
2, 1))
------------------------------------------------------------------------
----------------------------------------
f: Count number of employees whose salary is between Rs.35000 and R
s.50000.
(5,)
------------------------------------------------------------------------
----------------------------------------
g: Sort the table by Date of Joining
(19034212083, 'MAHESH', 'Admin', 'Manager', 47000, datetime.date(201
2, 2, 1))
(18034211001, 'AJAY', 'Admin', 'Sales', 45000, datetime.date(2013,
2, 1))
(19034212081, 'RAHUL', 'Non-Teaching', 'Clerk', 25000, datetime.date
(2013, 2, 1))
(18034211004, 'KABRI', 'Training', 'Manager', 75000, datetime.date(2
014, 2, 1))
(19034212085, 'SUHAG', 'Admin', 'Sales', 90000, datetime.date(2014,
2, 1))
(19034212080, 'SANJAY', 'Training', 'Manager', 35000, datetime.date
(2016, 2, 1))
(18034211003, 'DINESH', 'Teaching', 'Sales', 66000, datetime.date(20
```

```
18, 2, 1))
(18034211002, 'VIJAY', 'Teaching', 'Manager', 55000, datetime.date(2
019, 2, 1))
(19034212084, 'YATIN', 'Teaching', 'Sales', 40000, datetime.date(201
9, 2, 1))
(19034212082, 'KALRAV', 'Non-Teaching', 'Peon', 37000, datetime.date
(2020, 2, 1))
------------------------------------------------------------------------
----------------------------------------
h: Find the employees whose designation is Training and joined after
01/02/2014.
------------------------------------------------------------------------
----------------------------------------
i: Find all the employees whose designation is Clerk
(19034212081, 'RAHUL', 'Non-Teaching', 'Clerk', 25000, datetime.date
(2013, 2, 1))
------------------------------------------------------------------------
----------------------------------------
j:  Count number of Manager  in Teaching or Admin
(18034211002, 'VIJAY', 'Teaching', 'Manager', 55000, datetime.date(2
019, 2, 1))
(19034212083, 'MAHESH', 'Admin', 'Manager', 47000, datetime.date(201
2, 2, 1))
------------------------------------------------------------------------
----------------------------------------
```