

```
In [7]: #Question 1
class Bank_Account:
    def __init__(self,name,accno):
        self.balance=0
        self.name = name
        self.accno = accno

    def deposit(self):
        amount=float(input("Enter Deposit amount: "))
        self.balance += amount

    def withdraw(self):
        amount = float(input("Enter Withdraw amount: "))
        if self.balance>=amount:
            self.balance-=amount
        else:
            print("\n Insufficient balance  ")

    def display(self):
        print("\n Net Available Balance=",self.balance)

s = Bank_Account("Kanchan",12345)
print("Account Holder Name: {}, Account No: {}".format(s.name,s.accno))
s.deposit()
s.withdraw()
s.display()
```

Account Holder Name: Kanchan, Account No: 12345

Enter Deposit amount: 230929029

Enter Withdraw amount: 2

Net Available Balance= 230929027.0

```
In [11]: #Question 2
class Employee:
    def __init__(self, name, emp_id, salary):
        self.name = name
        self.id = emp_id
        self.salary = salary

    def calc_bonus(self, salary, bonus_percent):
        bonus = self.salary*bonus_percent
        print("Bonus: ",bonus)

    def print_detail(self):
        print("ID: ", self.id)
        print("\nName: ", self.name)
        print("Salary: ", self.salary)

emp = Employee("Krutika", 1, 500000000)
emp.print_detail()
emp.calc_bonus(emp.salary,0.20)
```

ID: 1

Name: Krutika

Salary: 500000000

Bonus: 100000000.0

```

In [19]: #question 3
class vehicle:
    def __init__(self,available):
        self.available = available
    flag = 0
    def rented(self,v):
        flag = 0
        for i in range(0,len(self.available)):
            if self.available[i] == v:
                print("Available")
                flag = 1
                break
        if flag == 0:
            print("Rented Out")

    def return_v(self):
        f = input("Do you want to return Y/N")
        if f == 'Y':
            Veh = str(input("Enter Vehicle company name"))
            self.available.append(Veh)
            print("Available Vehicles ",self.available)
        else:
            return

obj = vehicle(["Honda","Maruti","Cheverolet"])
V = str(input("Enter the company name "))
obj.rented(V)
print(obj.available)
obj.return_v()

```

```

Enter the company name Honda
Available
['Honda', 'Maruti', 'Cheverolet']
Do you want to return Y/NY
Enter Vehicle company nameJaguar
Available Vehicles ['Honda', 'Maruti', 'Cheverolet', 'Jaguar']

```

```
In [27]: #QUESTION 4
class Library:
    def __init__(self,listofbooks):
        self.availablebooks=listofbooks

    def displayAvailableBooks(self):
        print("The books available are:")
        for book in self.availablebooks:
            print(book)

    def lendBook(self,request_book):
        if request_book in self.availablebooks:
            print("The book is available")
            self.availablebooks.remove(request_book)
        else:
            print("The book is not currently available in the library!")

    def addBook(self,add_book):
        self.availablebooks.append(add_book)
        print("The book is added to the library")

    def show(self):
        print("The list of book is library are:",self.availablebooks)

book=Library(["Sky","Da Vinci Code","Inferno"])
book.show()
book.lendBook('Inferno')
book.show()
book.addBook('Digital Fotress')
book.show()
```

The list of book is library are: ['Sky', 'Da Vinci Code', 'Inferno']

The book is available

The list of book is library are: ['Sky', 'Da Vinci Code']

The book is added to the library

The list of book is library are: ['Sky', 'Da Vinci Code', 'Digital Fotress']

In [26]: *#Question 7*

```
class Student:
    def __init__(self, name, rollno, m1, m2):
        self.name = name
        self.rollno = rollno
        self.m1 = m1
        self.m2 = m2

    def display(self):
        print("Name : ", self.name)
        print("RollNo : ", self.rollno)
        print("Marks1 : ", self.m1)
        print("Marks2 : ", self.m2)
        print("\n")

    def calc_avg(self):
        avg = (self.m1 +self.m2)/2
        print("Average marks are :",avg)

obj = Student("KJ", 1, 100, 95)
obj.display()
obj.calc_avg()
```

Name : KJ
RollNo : 1
Marks1 : 100
Marks2 : 95

Average marks are : 97.5

```
In [29]: #Ques 9
class Social_Media:
    def __init__(self,username,posts):
        self.username=username
        self.posts=[]

    def add_posts(self,post):
        self.posts.append(post)
        print("Post is uploaded")

    def print_posts(self):
        if not self.posts:
            print("No posts")
            return

        print("The username:",self.username)
        for i in self.posts:
            print( i)

    def search_posts(self,keyword):
        found_posts = [post for post in self.posts if keyword.lower() in post]

        if found_posts:
            print(f"Posts containing '{keyword}':")
            for idx, post in enumerate(found_posts, start=1):
                print(f"{idx}. {post}")
        else:
            print(f"No posts found containing '{keyword}'.")

s=Social_Media("KJKJ",[])
s.add_posts("HI, this is first post")
s.print_posts()
s.add_posts("I am posting")
s.search_posts("posting")
```

```
Post is uploaded!
The username: KJKJ
HI, this is first post
Post is uploaded!
Posts containing 'posting':
1. I am posting
```

In []:

1

In []:

In []:

In []:

In []:

In []: