**5 a). A “Car” has the attributes Company\_name, model,color, Manufacuting\_year and price.**

**A Class is required to be created for “Car” to store the above attributes and**

**perform the following operations:**

**i) Get the details of “Car” object from user and store into Array of objects**

**ii) Display the details of “Car” object based on “Company”, “Model” and “Price”.**

**Algorithm:**

1. Start
2. Define Variable Of Self, Year, Make, Speed, Company, Price & N
3. For I In Range N
4. Display Car Details
5. Stop

**Coding:**

class Car:

def \_\_init\_\_(self, year, make, speed,company,price):

self.\_\_year\_model = year

self.\_\_make = make

self.\_\_speed = speed

self.\_\_company=company

self.\_\_price=price

def display\_car\_details(self):

print(str(self.\_\_year\_model),"\t",self.\_\_make,"\t",str(self.\_\_speed),"\t",self.\_\_company,"\t",str(self.\_\_price))

carobject=[] # car object

n=int(input("\n How many car details you want "))

for i in range(n):

year=input("\n Enter car Model")

make=input("\nEnter Car make")

speed=float(input("\nEnter the speed of Car"))

company=input("\nEnter company name")

price=float(input("\nEnter the price of car"))

carobject.append(Car(year,make,speed,company,price))

print("\n The Car model make speed-KMPL company price L/Crore\n")

for obj in carobject:

obj.display\_car\_details()

**Output:**

How many car details you want: 3

Enter car Model Ferrari: 488

Enter Car make: INDIA

Enter the speed of Car: 7.75

Enter company name: Ferrari

Enter the price of car: 4.40

Enter car Model: BMW2series

Enter Car make: India

Enter the speed of Car: 10.5

Enter company name: BMW

Enter the price of car: 32.00

Enter car Model: Fordkuga

Enter Car make: Japan

Enter the speed of Car: 16

Enter company name: ford

Enter the price of car: 17

The Car model make speed-KMPL company price L/Crore

Ferrari488 INDIA 7.75 Ferrari 4.4

BMW2series India 10.5 BMW 32.0

Fordkuga Japan 16.0 ford 17.0

**5 b) .Airline Reservation System contains the attributes of passengers such as Name, PAN-No.,**

**Mobile-no, Email-id, Source, Destination, Seat-No and Air-Fare, Travel\_date.**

**A Class is required to be created for “Airlilne” with the above attributes and perform**

**the following operations:**

**a. Get the details of “Airline” object from user and store into Array of objects**

**b. List details of all the passengers who travelled From “Bengaluru to London”.**

**c. List details of all the passengers who travelled From “USA to China” on 10th of Feb, 2020.**

**Algorithm:**

1. Start
2. Define Variable Of Self, Name, Source, Destination, Travel\_Date
3. For I In Range Airlineobject
4. Display Airlineobject Details
5. Stop

**Coding:**

Airlineobject=[]#arrary of object

class ARS:

def \_\_init\_\_(self,name,source,destination,travel\_date):

self.pass\_name=name

self.pass\_source=source

self.pass\_destination=destination

self.pass\_travel\_date=travel\_date

def display\_pass\_details(self):

print("\n", self.pass\_name,"\t\t",self.pass\_source,"\t\t",self.pass\_destination,"\t\t",self.pass\_travel\_date)

Airlineobject.append(ARS("Ashok","bangalore","USA","1/oct/2020"))

Airlineobject.append(ARS("shree","bangalore","London","2/oct/2020"))

Airlineobject.append(ARS("Roja","bangalore","China","3/oct/2020"))

Airlineobject.append(ARS("Dheeran","bangalore","London","5/oct/2020"))

Airlineobject.append(ARS("Eeshwar","USA","China","10/Feb/2020"))

print("\n passenger Name source Destination Travel date travelled between Bangalore and London")

for i in range(0,len(Airlineobject)):

if ((Airlineobject[i].pass\_source=="bangalore") and (Airlineobject[i].pass\_destination=="London")):

Airlineobject[i].display\_pass\_details()

print("\n passenger Name source Destination Travel date travelled between USA and China on 10th Feb 2020")

for i in range(0,len(Airlineobject)):

if ((Airlineobject[i].pass\_source=="USA") and (Airlineobject[i].pass\_destination=="China") and Airlineobject[i].pass\_travel\_date=="10/Feb/2020"):

Airlineobject[i].display\_pass\_details()

**Output:**

**passenger Name source Destination Travel date travelled between Bangalore and London**

shree bangalore London 2/oct/2020

Dheeran bangalore London 5/oct/2020

**passenger Name source Destination Travel date travelled between USA and China on 10th Feb 2020**

Eeshwar USA China 10/Feb/2020