In [1]:
```
import re
import sys
import json
class food_ord_app:
    def __init__(self):
        #references used for admin functionalities
        self.f_item={}
        self.f_id=len(self.f_item)+1
        #references used for user functionalities
        self.u_item={}
        self.u_id=len(self.u_item)+1
        #with open("user_info.json","r") as user_file:
            #self.u_item=json.load(user_file)

    #admin functionalities
    def admin_food_in(self):

        self.name=input("Enter name of food item = ")
        self.quantity=input("enter the quatity = ")
        self.price=int(input("Enter the price = Rs "))
        self.discount=int(input("Enter the discount = Rs "))
        self.stock=int(input("Enter the stock"))
        self.item_dc={"Name":self.name,"Quantity":self.quantity,"Price":self.price,"Discount":self.discount,"Stock":self.stock}
        self.f_id=len(self.f_item)+1
        self.f_item[self.f_id]= self.item_dc
        with open("admin_food.json", "w") as outfile:
            json.dump(self.f_item, outfile)
        print(self.f_item)

    def admin_food_edit(self):
        with open("admin_food.json","r") as a_file:
            self.f_item=json.load(a_file)
        print(self.f_item)
        n=input("Enter the food id that has to be editted = ")
        for i in self.f_item[n]:
            self.f_item[n][i]=input(f"Update the data for {i}: ")
        print(self.f_item)
        with open("admin_food.json", "w") as outfile:
            json.dump(self.f_item, outfile)
        print(self.f_item)

    def admin_food_view(self):
        with open("admin_food.json","r") as a_file:
            self.f_item=json.load(a_file)
        #print(self.f_item)
        self.f_id=len(self.f_item)+1
        for i in range(1,self.f_id):
            print("--------------------------------------------")
            print("Food ID : ",i,"\n")
            for j in self.f_item[str(i)]:
                print(j," : ",self.f_item[str(i)][j])


    def admin_food_remove(self):
        with open("admin_food.json","r") as a_file:
            self.f_item=json.load(a_file)
        n=input("Enter the food id that has to be removed = ")
        del self.f_item[n]
        with open("admin_food.json", "w") as outfile:
            json.dump(self.f_item, outfile)
        #print(self.f_item)

        #user functionalities
    def user_register(self):
        self.full_name=input("Enter full name : ")
        self.phone=int(input("Enter phone number : "))
        self.email=input("Enter the email : ")
        regex = '^[a-zA-Z0-9-_]+@[a-zA-Z0-9]+\.[a-z]{1,3}$"
        while not re.match(regex,self.email):
            self.email=input("Please enter valid email : ")
        self.address=input("Enter the address : ")
        self.password=input("Enter the password : ")
        self.u_item_dc={"Full Name":self.full_name,"Phone Number":self.phone,"Email":self.email,"Address":self.address,"Password":self.passw
        self.u_id=len(self.u_item)+1
        self.u_item[self.u_id]= self.u_item_dc
        with open("user_info.json", "w") as outfile:
            json.dump(self.u_item, outfile)
        #print(self.u_item)

    def ord_history(self):
        u={}
        with open("Order history.json","r") as user_file:
            u=json.load(user_file)
            #print(u)
        for k,v in u.items():
            print(k," ",v)

    def up_prof(self,b):
        print("b=",b)
        with open("user_info.json","r") as a_file:
            self.u_item=json.load(a_file)
        print(self.u_item)
        for i in self.u_item[str(b)]:
            self.u_item[str(b)][i]=input(f"Update the data for {i}: ")
        print(self.u_item)
        with open("user_info.json", "w") as outfile:
            json.dump(self.u_item, outfile)
        print(self.u_item)
    def place_ord(self):
        l1=["Tandoori Chicken (4 pieces) [INR 240]","Vegan Burger (1 Piece) [INR 320]","Truffle Cake (500gm) [INR 900]"]
        j=1
        for i in l1:
            print(j,". ",i)
            j+=1
        ch=list(map(int,input("choose your desired option number from the above displayed menu ").split()))
        l2=[]
        for j in ch:
            l2.append(l1[j-1])
        print("You have placed the following order \n")
        for k in l2:
            print(k)
        ch1=input("\nDo you want to order anything else?(y/n)")
        while ch1!='n':
            j=1
            for i in l1:
                print(j,". ",i)
                j+=1
            choice=int(input("choose your desired option number from the above displayed menu"))
            l2.append(l1[choice-1])
            print("You have placed the following order \n")
            for k in l2:
                print(k)
            ch1=input("Do you want to order anything else?(y/n)")

        d1={}
        for i in range(len(l2)):
            d1.update({i+1:l2[i]})
        with open("Order history.json","w") as user_file:
            json.dump(d1,user_file)

    def user_login(self):
        with open("user_info.json","r") as a_file:
            self.u_item=json.load(a_file)
        #print(self.u_item)
        e=input("Enter the email : ")
        p=input("Enter the password : ")
        a=0
        b=0
        for i in range(1,self.u_id+1):
            for j in self.u_item[str(i)]:
                if j=='Email':
                    if self.u_item[str(i)][j]==e:
                        a=i
                        #print(a)
                if j=='Password':
                    if self.u_item[str(i)][j]==p:
                    #print("yes")
                        b=1
        if a==b:
            print("\nWELCOME USER!!!!!!!!!!!!!!!!!!!")
            print("\n")
            print("1.Place New Order\n2.Order History\n3.Update Profile")
            option=int(input("Please enter option number from above mentioned options : "))
            if option==1:
                print("**************************************************************************")
                self.place_ord()

            elif option==2:
                print("**************************************************************************")
                self.ord_history()
            elif option==3:
                print("**************************************************************************")
                self.up_prof(b)
            else:
                ("Sorry! choice not found")
        else:
            print("SORRY! USER NOT FOUND")
            return


print("*********************************************************************************************")
print("WELCOME TO THE FOOD ORDERING APP")
print("1.Admin\n2.User\n")
ch=int(input("choose from the above menu : "))
#d={}

while ch!=3:
    if ch==1:
        food= food_ord_app()
        print("Admin functionalities\n1. Add new food items\n2. Edit food items \n3. View the list of all food items\n4. Remove a food item
        n=int(input("Please enter your choice : "))
        if n==1:
            ch1=input("Do you want to add items?(y/n)")
            while ch1!='n':
                food.admin_food_in()
                ch1=input("Do you want to add more items?(y/n)")
        if n==2:
            ch1=input("Do you want to edit any item?(y/n)")
            while ch1!='n':
                food.admin_food_edit()
                ch1=input("Do you want to edit more items?(y/n)")
        if n==3:
            food.admin_food_view()
        if n==4:
            ch1=input("Do you want to remove any item?(y/n)")
            while ch1!='n':
                food.admin_food_remove()
                ch1=input("Do you want to remove more items?(y/n)")

    elif ch==2:
        food= food_ord_app()
        print("User functionalities\n1. Register on the application\n2. Log in to the application")
        n=int(input("Please enter your choice : "))
        if n==1:
            food.user_register()
        elif n==2:
            food.user_login()
        else:
            print("Sorry your choice not found")
    else:
        print("Sorry your choice is not valid")
        print("Thankyou for visiting!")
        sys.exit(0)

    print("*********************************************************************************************")
    print("WELCOME TO THE FOOD ORDERING APP")
    print("1.Admin\n2.User\n3.Exit")
    ch=int(input("Choose from the above menu : "))
```

```
*********************************************************************************************
WELCOME TO THE FOOD ORDERING APP
1.Admin
2.User

choose from the above menu : 2
User functionalities
1. Register on the application
2. Log in to the application
Please enter your choice : 2
Enter the email : ps@hotmail.com
Enter the password : ps123

WELCOME USER!!!!!!!!!!!!!!!!!!!


1.Place New Order
2.Order History
3.Update Profile
Please enter option number from above mentioned options : 2
**************************************************************************
1   Tandoori Chicken (4 pieces) [INR 240]
2   Vegan Burger (1 Piece) [INR 320]
3   Tandoori Chicken (4 pieces) [INR 240]
**************************************************************************
*********************************************************************************************
WELCOME TO THE FOOD ORDERING APP
1.Admin
2.User
3.Exit
Choose from the above menu : 3
```

In [ ]: