# PROBLEM SOLVING AND PYTHON PROGRAMMING

## MINI PROJECT

## TEAM 5

TOPIC: RAILWAY RESERVATION SYSTEM



DONE BY

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```
import random
from random import randint as i

PNR=i(4000000000,10000000000)
passenger={}
lst=[]
list1=[12345,"MAS Express","Erode","Chennai central",165,720,560,110]
list2=[12346,"Guruvaiyur Express","Chennai central","Vellore",100,720,450,55]
def signin():
    global lst
    user=input("Enter username:")
    phone=int(input("Enter phone no:"))
    if(len(str(phone))==10):
       Pas=input("Enter password:")
       cnf=input("COnfirm password:")
       if(Pas!=cnf):
           print("Password not matching")
           signin()
       else:
           x=[user,Pas]
           lst.append(x)
       print("Signin successful")
       login()
    else:
        print("ENter a valid no")
        signin()
def login():

    global lst
    user=input("Enter username:")
    pas=input("enter password:")
    if user=="admin" and pas=="team5":
        i=int(input("Admin:"))
        if(i==1):
            for i in passenger.values():
                print(i)
        elif(i==2):
               print(lst)
        login()
    elif [user,pas] in lst:
         print("login successful")
    else:
        print("incorrect login")
        x=int(input("Enter 1 to sign in\nEnter 2 to login again "))
        if(x==1):
```

```
            signin()
        elif(x==2):
            login()
def book1():
    global PNR,passenger,list1,list2
    from prettytable import PrettyTable as t
    table=t(["Name","Age","Gender","seat","seat no","fare","Train no"])

    x=int(input("Enter your choice(4 for 2S /6 for AC):"))
    seat1=x+1
    if x ==6:
        seat="AC"
        fare=550
    else:
        seat="2S"
        fare=165
    people=int(input("Enter total tickets to be booked:"))
    if(people>list1[x]):
        print("sry no of seats avaible is low")
        book1()
    else:

        for i in range(people):
            name=input("Enter passenger name:")
            age=int(input("Enter age:"))
            gender=input("Enter gender(M/F/T):")
            x=[name,age,gender,seat,list1[seat1],fare,list1[0]]
            list1[seat1]=list1[seat1]-1
            table.add_row(x)
    passenger[PNR]=table
    print("PNR no:",PNR)
    print("The train no:",12345)
    PNR+=1
    print(table)
    print("Total cost is",people*fare)
def book2():
    global PNR,passenger,list2
    from prettytable import PrettyTable as t
    table=t(["Name","Age","gender","seat","seat no","fare","train no"])

    x=int(input("Enter your choice(4 for 2S /6 for AC):"))
    seat1=x+1
    if x ==6:
        seat="AC"
        fare=450
    else:
        seat="2S"
        fare=100
```

```
    people=int(input("Enter total tickets to be booked:"))
    if(people>list2[x]):
        print("sry no of seats avaible is low")
        book1(list2)
    else:

        for i in range(people):
            name=input("Enter passenger name:")
            age=int(input("Enter age:"))
            gender=input("Enter gender(M/F/T):")
            x=[name,age,gender,seat,list2[seat1],fare,list2[0]]
            list2[seat1]=list2[seat1]-1
            table.add_row(x)
    passenger[PNR]=table
    print("thE PNR NO:",PNR,"trAIN no:",12346)
    PNR+=1
    print(table)
    print("Total cost is",people*fare)
def check():
    P=int(input("Enter PNR no:"))
    if(P in passenger):

     print(passenger[P])
    else:
        print("Enter crt pnr")

def book():
    train_no=int(input("train no:"))
    if train_no in list1:
        print("available seats:\n{} for 2S\v {} for
AC".format(list1[5],list1[7]))
        book1()
    elif train_no in list2:
         print("available seats:\n{} for 2S\v {} for
AC".format(list2[5],list2[7]))
         book2()
def cancel():
    P=int(input("enter PNR no:"))
    del passenger[P]
    print("Ticket cancelled successfully")
def trains():
    from prettytable import PrettyTable as t
    global list1 ,list2
    global table
    head=["Train no","Train name","Start","End","2S Fare","seats","AC
Fare","AC seats"]

    table=t(head)
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```
    table.add_row(list1)
    table.add_row(list2)
    print(table)
    book()
while True:
    print("Welcome\n\t\tTo\v\t\t\tPRRS")
    x=input("New user?(Y/N):")
    if x=="Y":
        signin()
    else:
        login()

    while True:
       print("'1.book ticket\n2.PNR Status\n3.Cancel Ticket\n4.logout'")
       x=int(input("Enter your choice:"))
       if(x==1):
          trains()
       elif(x==2):
          check()
       elif(x==3):
          cancel()
       elif(x==4):
           break
    print("{:*^100}".format("Thankyou"))
    _=input()
```