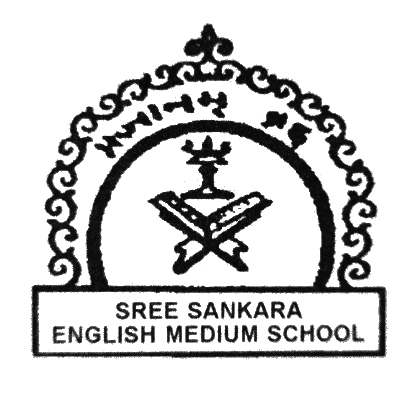
**SREE SANKARA ENGLISH**

**MEDIUM SCHOOL**

**KURUPPANKULANGARA**

**CHERTHALA**

**[CBSE AFFILIATION NO: 930384]**

****

**ACADEMIC YEAR: 2023-24**

**COMPUTER PROJECT**

**PROJECT REPORT ON:**

**RAILWAY TICKET RESERVATION SYSTEM**

**NAME : [Your Name]**

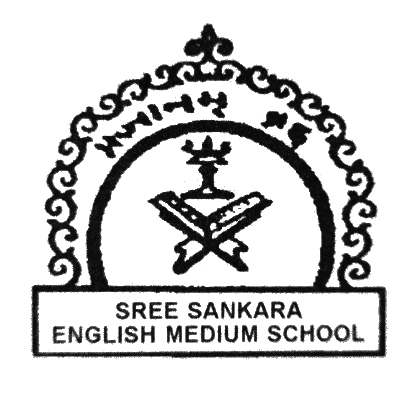
**CLASS : XII**

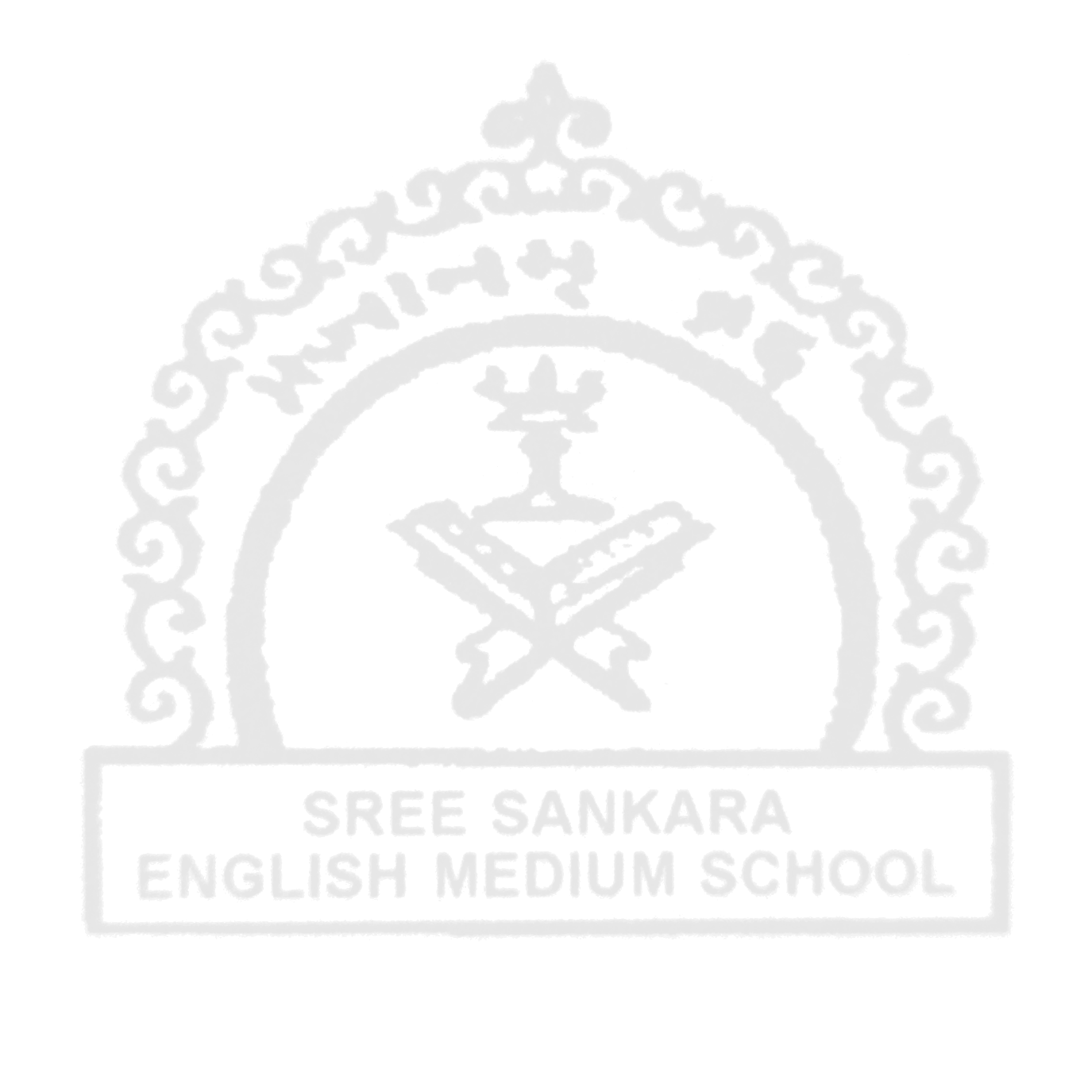
**ROLL NO : []**

**SUBJECT : Computer Science**

**SUBJECT CODE :** 083

**SREE SANKARA ENGLISH MEDIUM SCHOOL**

****



**CERTIFICATE**

This is to certify that **[Your Name]** Roll No: **[]** has successfully completed the project work entitled **Railway Ticket Reservation System** in the subject Computer Science (083) laid down in the regulations of CBSE for the purpose of Practical Examination in Class **XII** to be held in Sree Sankara English Medium School, Cherthala on **2023-24.**

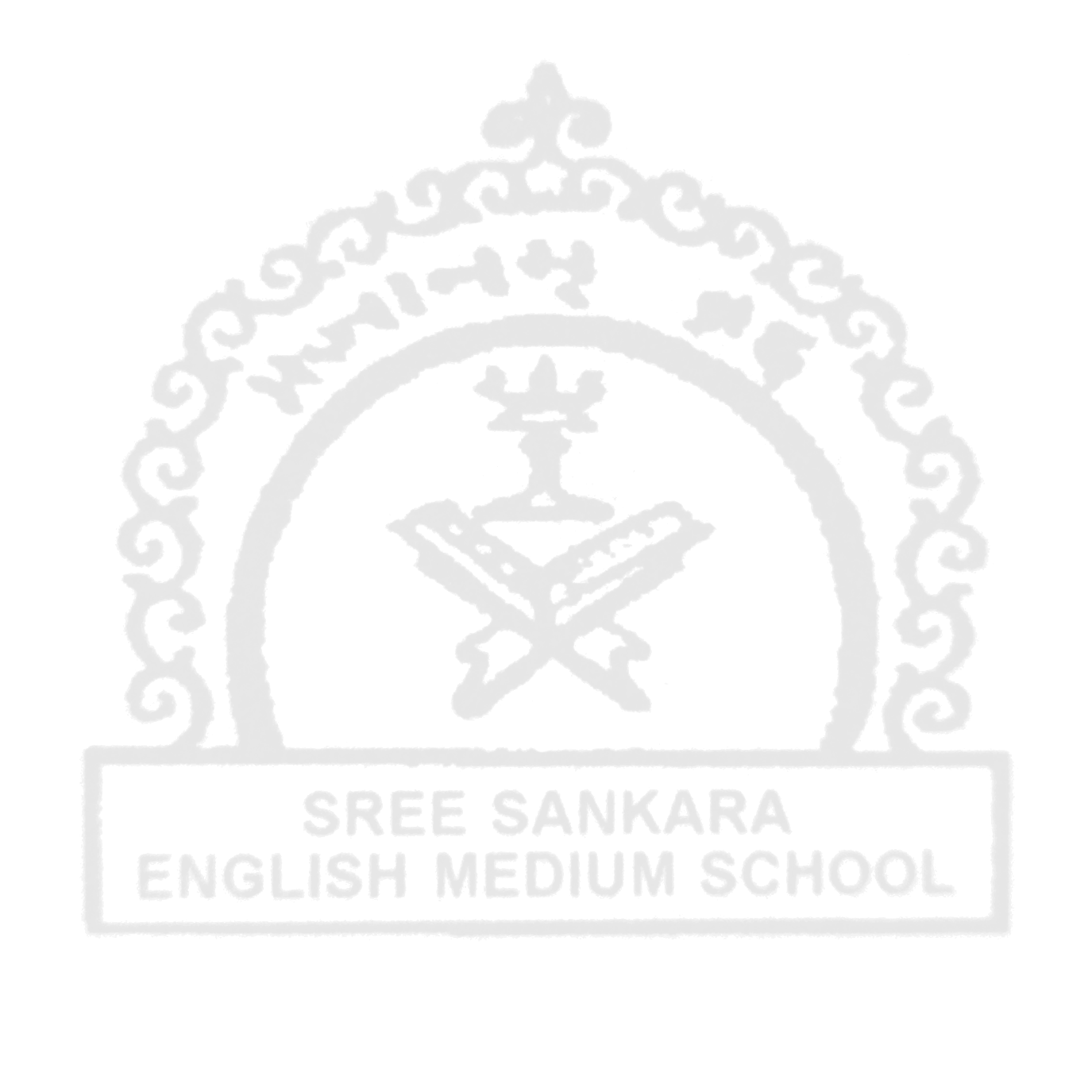
**Dr. U Suresh Kumar**

**Principal**

**INTERNAL EXAMINER EXTERNAL EXAMINER**

**DECLARATION**

I **[Your Name]** hereby declare that this project work entitled “**Railway Ticket Reservation System**” is done by me as a part of my **XII** Course under the guidance of ***Mrs. Karithka Padmakumar***, Computer Science Teacher of Sree Sankara English Medium School, Kuruppankulangara, Cherthala.



Place:

Date: Signature of the Candidate

|  |  |  |
| --- | --- | --- |
| Table of Contents | | |
| S.No | DESCRIPTION | Page No: |
| 01 | ACKNOWLEDGEMENT | 1 |
| 02 | INTRODUCTION | 2 |
| 03 | OBJECTIVES OF THE PROJECT | 3 |
| 04 | PROPOSED SYSTEM | 4 |
| 05 | SOURCE CODE |  |
| 06 | OUTPUT |  |
| 07 | SOFTWARE AND HARDWARE REQUIREMENTS |  |
| 08 | BIBLIOGRAPHY |  |

Acknowledgement

This project ”**Railway Ticket Reservation System**” is done as per CBSE Syllabus and as a part of my curriculum. This time I am utilizing to thank all people who have been concerned with this project.

Primarily I would like to thank God for being able to complete this project with success. Then I would like to thank our honorable Principal ***Dr. U Suresh Kumar*** sir for allowing us to have the extensive use of the school facilities for the project.

My sincere thanks to ***Mrs. Karthika Padmakumar*** our guide who critically reviewed my project and helped in solving each and every problem occurred during the implementation of this project.

I also express my sincere thanks to my parents, classmates and other people who have helped me in bringing out this project.

Thanking You,

**[Your Name]**

**INTRODUCTION**

The **Railway Ticket Reservation** Project significantly enhances railway system efficiency through centralized database management, automating ticket booking and cancellation processes, and providing quick access to passenger information. The inclusion of a food booking feature streamlines onboard services, allowing railway staff to efficiently manage food orders and inventory. The user-friendly interface simplifies interactions, contributing to a seamless experience for both staff and passengers. By automating key processes and ensuring centralized data management, the project enables railways to improve overall service delivery, reduce errors, and enhance customer satisfaction.

**OBJECTIVES OF THE PROJECT**

1. **EFFICENT TICKET MANAGEMENT:**

Design and implement a system that allows for the efficient management of railway tickets, including booking and cancellation processes.

1. **COMPREHENSIVE TRAIN INFORMATION:**

Provide a comprehensive database of train information, including train numbers, names, source and destination stations, ticket fares, arrival and departure times, and operating days.

1. **USER-FRIENDLY INTERFACE:**

Develop a user-friendly interface that enables users to easily interact with the system for tasks such as viewing train details, booking tickets, cancelling tickets, and managing food orders.

1. **ACCURATE PASSENGER RECORD:**

Create a robust mechanism for accurate recording and storage of passenger details, such as name, age, gender, coach class, and phone number, ensuring data integrity and reliability.

1. **FOOD ORDERING AND MANAGEMENT:**

Implement a food ordering and management system, allowing passengers to view a food menu, place food orders, and cancel food orders if necessary.

1. **DATABASE INTEGRITY:**

Ensure the integrity and reliability of the MySQL database by implementing appropriate constraints, relationships, and normalization techniques.

1. **REGULATORY COMPLIANCE:**

Ensure compliance with relevant regulatory requirements and standards governing railway ticket reservation systems.

**PROPOSED SYSTEM**

The proposed system aims to augment the existing Railway Ticket Reservation project by introducing key enhancements. First and foremost, the implementation of secure user authentication and authorization mechanisms will be integrated to ensure controlled access to sensitive data and functionalities, enhancing overall system security. Additionally, the system will undergo refinement with the incorporation of robust error handling and input validation mechanisms. This improvement is vital for ensuring the reliability of the system by preventing potential issues stemming from incorrect user inputs or database operations. These enhancements collectively contribute to a more secure, reliable, and user-friendly Railway Ticket Reservation system.

Source Code

import mysql.connector

con = mysql.connector.connect(host="localhost", user="root", password="root")

if con.is\_connected():

    print("Connected\n")

else:

    print("Not connected\n")

cursor = con.cursor()

#Dropping and creating a new database named "Railway\_system"

cursor.execute("DROP DATABASE IF EXISTS Railway\_system")

cursor.execute("CREATE DATABASE IF NOT EXISTS Railway\_system")

print("Database created.\n")

cursor.execute("USE Railway\_system")

#Creating 4 tables named "Ticket\_Reservation", "book\_food", "passenger"

cursor.execute("CREATE TABLE IF NOT EXISTS Ticket\_Reservation (Train\_no int primary key, Train\_name char(50), Source char(50), Destination char(50), Ticket\_fare int, Arriving\_time varchar(50), Departure\_time varchar(50), Day char(10))")

cursor.execute("CREATE TABLE IF NOT EXISTS book\_food(type char(12), item char(12), pno char(15), name char(12), coach char(10))")

cursor.execute("CREATE TABLE IF NOT EXISTS passenger (Tno int, Tname char(20), sstn char(20), DS char(20), Name char(15), Age int, Gender char(1), Coach\_class char(15), Phone\_Number int)")

cursor.execute("CREATE TABLE IF NOT EXISTS food(Type char(25), Item char(25), Price int)")

#Inserting details of food

cursor.execute("INSERT INTO food(Type, Item, Price)values('Appetizer', 'Spring Rolls', 8)")

cursor.execute("INSERT INTO food(Type, Item, Price)values('Main Course', 'Chicken Curry', 15)")

cursor.execute("INSERT INTO food(Type, Item, Price)values('Dessert', 'Chocolate Cake', 10)")

cursor.execute("INSERT INTO food(Type, Item, Price)values('Beverage', 'Orange Juice', 4)")

cursor.execute("INSERT INTO food(Type, Item, Price)values('Side Dish', 'Garlic Bread', 6)")

#Inserting details of 10 Trains

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Coimbatore Express', 'Rameshwaram', 'Coimbatore', 2055, '11:17:00', '11:58:00', 'Tuesday')".format(12023)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Chennai Express', 'Alleppey', 'Chennai central', 540, '18:42:00', '05:50:00', 'Sunday')".format(12163)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Ahmedabad passenger', 'Ahmedabad junction', 'Mumbai central', 175, '01:15:00', '07:30:00', 'Monday')".format(59442)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Chennai mail', 'Trivandrum central', 'Chennai central', 1755, '14:50:00', '07:30:00', 'All days')".format(12634)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Alleppey Express', 'Kannur', 'Alleppey', 600, '06:36:00', '02:27:00', 'All days')".format(22639)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Maveli Express', 'Manglore central', 'Trivandrum central', 367, '17:45:00', '07:05:00', 'Friday')".format(16604)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Eranad Express', 'Nagarcoil junction', 'Manglore central', 340, '02:50:00', '08:25:00', 'Saturday')".format(16605)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Banglore Express', 'Ernakulam junction', 'Banglore city', 400, '22:15:00', '09:08:00', 'All days')".format(12678)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Jan shathabti Express', 'Kannur', 'Trivandrum central', 760, '04:50:00', '14:10:00', 'All days')".format(12081)

cursor.execute(st)

st = "INSERT INTO Ticket\_Reservation(Train\_no, Train\_name, Source, Destination, Ticket\_fare, Arriving\_time, Departure\_time, Day) values({}, 'Kerala Express', 'New Delhi', 'Trivandrum central', 945, '11:25:00', '14:35:00', 'Monday')".format(12626)

cursor.execute(st)

con.commit()

ans = 'y'

# Menu starts from here.

while ans == 'y':

    print(" +-Welcome to Railways Ticket Reservation Portal-+")

    print(" 1.Train Details")

    print(" 2.Booking of Ticket")

    print(" 3.Cancellation of Ticket")

    print(" 4.Food Menu")

    print(" 5.Food Booking")

    print(" 6.Cancellation of food")

    print(" 7.Quit\n")

    n = int(input("Enter your choice(1-4): "))

    if n == 1: #1.Train Details

        q = "SELECT \* FROM Ticket\_Reservation"

        cursor.execute(q)

        data = cursor.fetchall()

        for i in data:

            print(i)

        print("\n")

    elif n == 2: #2. Booking of Ticket

        loc = input("Enter your location: ")

        d = "SELECT \* FROM Ticket\_Reservation WHERE Destination='{}'".format(loc)

        cursor.execute(d)

        T = cursor.fetchall()

        for row in T:

            print(row)

        too = int(input("Enter the Train no: "))

        trname = input("Enter the Train Name: ")

        sstn = input("Enter your Source Station: ")

        dstn = input("Enter your Destination Station: ")

        name = input("Enter your Name: ")

        age = int(input("Enter your Age: "))

        gen = input("Enter your Gender: ")

        cls = input("Enter the Coach class: ")

        ph = int(input("Enter your Phone number: "))

        tb = "INSERT INTO passenger values({}, '{}', '{}', '{}', '{}', {}, '{}', '{}', {})".format(

            too, trname, sstn, dstn, name, age, gen, cls, ph)

        cursor.execute(tb)

        con.commit()

        print("Successfully booked")

        print("\n")

    elif n == 3: #3.Cancellation of Ticket

        g = input("Enter your phone number")

        h = "DELETE FROM passenger WHERE Phone\_Number='{}'".format(g)

        cursor.execute(h)

        con.commit()

        print("Ticket cancelled.")

        print("\n")

    elif n == 4: #4.Food Menu

        q = "SELECT \* FROM food"

        cursor.execute(q)

        t = cursor.fetchall()

        for i in t:

            print(i)

        print("\n")

    elif n == 5: #Food Booking

        food\_type = input("Enter the type of food you would like to order: ")

        food\_name = input("Enter the food item: ")

        phn\_no = input("Enter you Phone number: ")

        name = input("Enter your name: ")

        coach = input("Enter the coach: ")

        con.commit()

        t = "INSERT INTO book\_food values('{}', '{}', '{}', '{}', '{}')".format(food\_type,food\_name,phn\_no,name,coach)

        cursor.execute(t)

        con.commit()

        print("Order Sucessful, Your food will arrive shortly to your corresponding compartment.\n")

    elif n == 6: #6.Cancellation of food

        n = input("Enter your name: ")

        p = input("Enter your Phone number: ")

        i = input("Name of item to be cancelled: ")

        q = "DELETE FROM book\_food WHERE name='{}'".format(n)

        cursor.execute(q)

        con.commit()

        print("Your order has been cancelled.\n")

    elif n == 7:

        exit()

file named as Railway\_ticket\_reservation.py

Output: