Faculty of Engineering, Science & Technology

IQRA UNIVERSITY



Programming Fundamentals

Project Report

[Summer-2023]

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Semester of both member’s: **Summer Semester**

Batch: 2023

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Acknowledgment

*We would like to sincerely thank our lecturer at the IQRA University Airport Campus,* ***Miss Ghazala Shafi Sheikh,*** *for her important advice and assistance throughout the creation of this project. Our understanding of project management and programming ideas has been greatly influenced by her knowledge and support.*

*Thank you*

*Miss Ghazala Shafi Sheikh*

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***1.Objectives:***

***Develop a Multi-Modal Transport System Interface:***

*Create an interactive program that simulates a multi-modal transport system encompassing airplane, railway, and car transport modes.*

***Enable User Interaction:***

*Allow users to interact with the program through a command-line interface, providing them with options to choose between different transport modes and actions.*

***Implement Booking Functionality:***

*Enable users to book tickets for various transport modes, such as airplanes, trains, and cars, by entering their personal details and selecting payment methods.*

***Support Ticket Removal:***

*Implement the ability for users to remove booked tickets, requiring them to provide their personal identification information and the ticket number to be removed.*

***Display Transport Details:***

*Provide users with the ability to view relevant details about available transport options, such as flight routes, train schedules, and car destinations.*

***Integrate Security Measures:***

*Incorporate a security key mechanism to restrict unauthorized access to sensitive actions, like ticket removal, ensuring user privacy and system security.*

***Manage Payment Methods:***

*Allow users to choose from different payment methods when booking tickets, including cash or credit card, and ensure the accuracy and security of payment information.*

***Handle Invalid Inputs:***

*Implement robust input validation to handle cases where users provide incorrect or invalid information, providing helpful error messages for guidance.*

***Implement Exit Mechanism:***

*Develop a graceful exit mechanism that enables users to end their interaction with the program at any point and provide a courteous farewell message.*

***2.Introduction:***

*In the modern world, efficient and integrated transportation systems play a pivotal role in connecting people and places. In line with this, we present a dynamic and interactive program built in the C programming language, designed to simulate a multi-modal transport system. This program offers users the opportunity to experience the intricacies of various transportation modes, including airplanes, railways, and cars, all within the virtual realm.*

***3.Description:***

*The Multi-Modal Transport System Simulation Program is a comprehensive and interactive software application developed in the C programming language.*

* *Program will ask you to select between different transport systems like Airline, Railway and Car Transport Systems.*
* *Then once you select one of these transport systems, it will ask you to enter security key in airline and railway just like a security check in real life.*
* *SECURITY KEY = 12345 or 6789*
* *Then you can perform different actions like check today’s data, book a ticket/seat also you can remove a ticket just like a real transport system.*
* *NIC NUMBER = 123456789*
* *You can only enter those locations that are stored in database like for car system you can enter location = gulshan or malir .*
* *On Payment method you can select cash or credit card and credit card number is only going to be valid when it matches the database just like real life.*
* *CREDIT CARD NO: 2468*
* *I HOPE YOU LIKE IT !*

***4.Coding:***

#include<stdio.h>

#include<string.h>

int main(){

int select\_Airline,select\_Transport,select\_Airline\_Mode,sec\_Key,nic\_Number,payment\_Method,creditcard\_User,ticket\_No,car\_Transport,car\_Transport\_Mode;

int repeat = 1;

int sec\_Keys[2] = {12345,6789};

int ticket\_Nums[10];

int num\_Ticket = 1;

int ticket\_Number = 16120;

int creditcard\_Users[2]={2468,1357};

int nic\_Numbers[2] = {123456789,789456123};

char name\_User[50];

char location\_User[50];

char user\_Destination[50];

char destinations\_Car[2][10] = {"malir","gulshan"};

char location\_Available[7][20] = {"Karachi","Islamabad","Lahore","Dubai","Multan","Faisalabad","Peshawar"};

printf("-------------------------------------------------------------------------------\n");

printf("--------------------WELCOME TO THE TRANSPORT SYSTEM----------------------------\n");

printf("-------------------------------------------------------------------------------\n\n");

while(1){

printf("\n\nFollowing are the transport systems:\n");

printf("::::::::::::::::::::::::::::::::::::\n");

printf("1.Airport System\n2.Railway System\n3.Car Transport System\n4.Exit\n");

printf("::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Transport);

if(select\_Transport==1){

repeat = 1;

printf("\n\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("-------------------------WELCOME TO JINNAH INTERNATIONAL AIRPORT------------------------");

printf("\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("\n\n");

printf("Enter Security Key: ");

scanf("%d",&sec\_Key);

for(int i = 0;i<2;i++){

if(sec\_Key==sec\_Keys[i]){

printf("\n-------------------------\n");

printf("\_\_\_\_\_ACCESS GRANTED\_\_\_\_\_\_\n");

printf("--------------------------\n\n");

while(repeat){

printf("Following are the airlines we have:\n");

printf("::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Shaheen Airline\n2.Air Blue\n3.PIA\n4.Jinnah Express\n5.Exit\n\n");

printf("::::::::::::::::::::::::::::::::::::\n\n");

printf("Select: ");

scanf("%d",&select\_Airline);

if(select\_Airline == 1){

printf("\n::::::::::::::::::WELCOME TO SHAHEEN AIRLINE:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Flights\n2.Book A Ticket\n3.Remove a Ticket\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Flight\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------\n");

printf("LG\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("LH\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("OK\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("LG\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("ZA\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO TICKET BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------AIRLINE: SHAHEEN AIRLINE 1519MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE TICKET SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline == 2){

printf("::::::::::::::::::WELCOME TO AIRBLUE AIRLINE:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Flights\n2.Book A Ticket\n3.Remove a Ticket\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Flight\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------\n");

printf("LG\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("LH\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("OK\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("LG\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("ZA\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO TICKET BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------AIRLINE: AIRBLUE AIRLINE 1519MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE TICKET SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline == 3){

printf("::::::::::::::::::WELCOME TO PIA AIRLINE:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Flights\n2.Book A Ticket\n3.Remove a Ticket\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Flight\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------\n");

printf("LG\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("LH\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("OK\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("LG\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("ZA\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO TICKET BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------AIRLINE: PIA AIRLINE 1519MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE TICKET SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline == 4){

printf("::::::::::::::::::WELCOME TO JINNAH EXPRESS AIRLINE:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Flights\n2.Book A Ticket\n3.Remove a Ticket\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Flight\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------\n");

printf("LG\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("LH\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("OK\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("LG\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("ZA\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO TICKET BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------AIRLINE: JINNAH EXPRESS AIRLINE 1519MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE TICKET SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline == 5){

printf("::::::::::::::::::EXIT:::::::::::::::::\n\n");

break;

}

else{

printf("\nPlease Select a valid Airline.\n\n");

}

}

}

else if(sec\_Key!=sec\_Keys[i]){

printf("||ALERT|| Reported To Security Depart!");

break;

}

}

}

else if(select\_Transport==2){

repeat = 1;

printf("\n\n::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("-------------------------WELCOME TO DRIGH ROAD STATION----------------------------\n");

printf("::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("Enter Security Key: ");

scanf("%d",&sec\_Key);

for(int i = 0;i<2;i++){

if(sec\_Key==sec\_Keys[i]){

printf("\n-------------------------\n");

printf("\_\_\_\_\_ACCESS GRANTED\_\_\_\_\_\_\n");

printf("--------------------------\n\n");

while(repeat){

printf("Following Are The Available Trains We Have:\n");

printf("::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Green Line\n2.Tezgaam\n3.Awami Express\n4.Jinnah Express\n5.Exit\n\n");

printf("::::::::::::::::::::::::::::::::::::\n\n");

printf("Select: ");

scanf("%d",&select\_Airline);

if(select\_Airline==1){

printf("\n::::::::::::::::::WELCOME TO GREEN LINE SECTION:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Train Routes\n2.Book A Seat\n3.Remove a Seat\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Train Seat\t\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("Green Line\t\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("Tez Gaam\t\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("Allama Iqbal Express\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("Awami Express\t\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("Hazara Express\t\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO SEAT BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TRAIN: GREEN LINE 1666MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==5){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline==2){

printf("\n::::::::::::::::::WELCOME TO TEZGAAM SECTION:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Train Routes\n2.Book A Seat\n3.Remove a Seat\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Train Seat\t\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("Green Line\t\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("Tez Gaam\t\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("Allama Iqbal Express\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("Awami Express\t\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("Hazara Express\t\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO SEAT BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TRAIN: TEZGAAM 1666MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline==3){

printf("\n::::::::::::::::::WELCOME TO AWAMI EXPRESS SECTION:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Train Routes\n2.Book A Seat\n3.Remove a Seat\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Train Seat\t\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("Green Line\t\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("Tez Gaam\t\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("Allama Iqbal Express\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("Awami Express\t\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("Hazara Express\t\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO SEAT BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TRAIN: AWAMI EXPRESS 1666MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline==4){

printf("\n::::::::::::::::::WELCOME TO JINNAH EXPRESS SECTION:::::::::::::::::\n\n");

while(repeat){

printf("\nFollowing Are The Actions You Can Perform:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Check Today's Train Routes\n2.Book A Seat\n3.Remove a Seat\n4.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::\n");

printf("\n");

printf("Select: ");

scanf("%d",&select\_Airline\_Mode);

if(select\_Airline\_Mode==1){

printf("::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("Train Seat\t\t\t\tFrom\t\t\tTime\t\t\tRemarks\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("Green Line\t\t8256\t\tIslamabad\t\t5:40\t\t\tDelayed 7:00\n");

printf("Tez Gaam\t\t2322\t\tLahore\t\t\t8:00\t\t\tOn Time\n");

printf("Allama Iqbal Express\t1666\t\tKarachi\t\t\t2:00\t\t\tOn Time\n");

printf("Awami Express\t\t8282\t\tIslamabad\t\t12:00\t\t\tOn Time\n");

printf("Hazara Express\t\t7588\t\tQuetta\t\t\t11:00\t\t\tDelayed 2:00\n");

printf("------------------------------------------------------------------------------------------------------\n");

printf("\n");

}

else if(select\_Airline\_Mode==2){

printf("---------------WELCOME TO SEAT BOOKING SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

printf("Please, Enter Your Name: ");

scanf("%s",&name\_User);

for (int i = 0; i < 3; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Please,Enter Your Location: ");

scanf("%s", &location\_User);

printf("Please,Enter Your Destination: ");

scanf("%s",user\_Destination);

for(int i = 0;i<7;i++){

if(strcmp(user\_Destination,location\_Available[i])==0){

check2 = 1;

printf("\n----------------------\n");

printf("Payment Methods:\n");

printf("1. Cash\n2. Credit Card\n");

printf("Select: ");

scanf("%d", &payment\_Method);

if (payment\_Method == 1) {

printf("\n\nHere's Your Receipt!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

break;

} else if (payment\_Method == 2) {

printf("Enter Credit Card No: ");

scanf("%d", &creditcard\_User);

int validCard = 0;

for (int i = 0; i < 3; i++) {

if (creditcard\_User == creditcard\_Users[i]) {

printf("\n\nPayment Received!\n");

printf("Here is your Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------LOCATION: %s\n",location\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TRAIN: JINNAH EXPRESS 1666MD\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

if (!check2) {

printf("\n\nPlease Enter a Valid Destination!\n\n");

break;

}

}

if(!check){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==3){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if (!ticketFound) {

printf("------------------------\n");

printf("No Ticket ID Found!\n");

printf("------------------------\n");

}

}

if(!check){

printf("\n\nInvalid Nic Number\n\n");

break;

}

}

}

else if(select\_Airline\_Mode==4){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

else if(select\_Airline==5){

printf("\n\nExiting.....\n\n");

repeat--;

}

}

}

}

}

else if(select\_Transport==3){

printf("\n::::::::::::::::::WELCOME TO CAR TRANSPORT SYSTEM:::::::::::::::\n\n");

printf("Following are the Car Transports we have:\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.White Cab\n2.Karachi Taxi\n3.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("Select: ");

scanf("%d",&car\_Transport);

if(car\_Transport== 1){

printf("\n::::::::::::::WELCOME TO WHITE CAB TRANSPORT:::::::::::::\n\n");

printf("Following are the actions:\n\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("1.Book a Cab\n2.Remove a Cab\n3.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("Select: ");

scanf("%d",&car\_Transport\_Mode);

if(car\_Transport\_Mode==1){

printf("\n:::::::::::::::::::WELCOME TO BOOK A TAXI SECTION::::::::::::::::::::::\n\n");

int check2 = 0;

printf("Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

for(int i = 0;i<2;i++){

if(nic\_Number==nic\_Numbers[i]){

check2 = 1;

int found = 0;

printf("Enter Your Name: ");

scanf("%s",name\_User);

printf("Enter your destination: ");

scanf("%s",&user\_Destination);

for(int i = 0;i<2;i++){

if(strcmp(user\_Destination, destinations\_Car[i]) == 0){

found = 1;

printf("Select Payment Method:\n");

printf("1.Credit Card\n2.Cash\n");

printf("Select: ");

scanf("%d",&payment\_Method);

if(payment\_Method==2){

printf("Here's Your Reciept!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

}

else if(payment\_Method==1){

int validCard = 0;

printf("Enter Credit Card No: ");

scanf("%d",&creditcard\_User);

for(int i = 0;i<=2;i++){

if(creditcard\_User==creditcard\_Users[i]){

printf("Payment Recieved!\n");

printf("Here is your Cab Ticket!\n");

// Draw ticket!

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

}

}

if(!check2){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(car\_Transport\_Mode==2){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check=1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

check2 = 1;

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if(!check2){

printf("\n\nNo Ticket ID Found..\n\n");

break;

}

}

if(!check){

printf("\n\nPlease Enter Valid Nic Number.\n\n");

break;

}

}

}

} else if(car\_Transport==2){

printf("\n::::::::::::::WELCOME TO KARACHI TAXI TRANSPORT:::::::::::::\n\n");

printf("Following are the actions:\n\n");

printf("::::::::::::::::::::::::::::::::::::::::::\n");

printf("\n1.Book a Taxi\n2.Remove a Taxi\n3.Exit\n");

printf("\n::::::::::::::::::::::::::::::::::::::::::\n\n");

printf("Select: ");

scanf("%d",&car\_Transport\_Mode);

if(car\_Transport\_Mode==1){

printf("\n:::::::::::::::::::WELCOME TO BOOK A TAXI SECTION::::::::::::::::::::::\n\n");

int check2 = 0;

printf("Enter Your Nic Number: ");

scanf("%d",&nic\_Number);

int found = 0;

for(int i = 0;i<2;i++){

if(nic\_Number==nic\_Numbers[i]){

check2 = 1;

printf("Enter Your Name: ");

scanf("%s",name\_User);

printf("Enter your destination: ");

scanf("%s",&user\_Destination);

for(int i = 0;i<2;i++){

if(strcmp(user\_Destination, destinations\_Car[i]) == 0){

found = 1;

printf("Select Payment Method:\n");

printf("1.Credit Card\n2.Cash\n");

printf("Select: ");

scanf("%d",&payment\_Method);

if(payment\_Method==2){

printf("Here's Your Reciept!\n");

printf("Pay At the counter Number 25, Thank You!!\n\n");

}

else if(payment\_Method==1){

int validCard=0;

printf("Enter Credit Card No: ");

scanf("%d",&creditcard\_User);

for(int i = 0;i<=2;i++){

if(creditcard\_User==creditcard\_Users[i]){

printf("Payment Recieved!\n");

printf("Here is your Taxi Ticket!\n");

printf("Thank You!!\n\n");

num\_Ticket++;

ticket\_Number+=1;

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_TICKET\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

printf("------------NAME: %s\n",name\_User);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------DESTINATION: %s\n",user\_Destination);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("------------TICKET NO: %d\n",ticket\_Number);

printf(":::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::::\n");

printf("\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\n");

ticket\_Nums[num\_Ticket] = ticket\_Number;

validCard = 1;

}

if (!validCard) {

printf("Invalid Credit Card Number!\n");

}

}

}

}

}

}

if(!check2){

printf("\nInvalid Nic Number.\n\n");

break;

}

}

}

else if(car\_Transport\_Mode==2){

printf("---------------WELCOME TO REMOVE SEAT SECTION--------------------\n\n");

int check = 0;

int check2 = 0;

printf("Please, Enter Your Nic Number: ");

scanf("%d", &nic\_Number);

for (int i = 0; i < 2; i++) {

if (nic\_Number == nic\_Numbers[i]) {

check = 1;

printf("Enter Ticket Number: ");

scanf("%d", &ticket\_No);

int ticketFound = 0;

for (int j = 0; j < 10; j++) {

if (ticket\_No == ticket\_Nums[j]) {

check2 = 1;

ticket\_Nums[j] = 0; // Remove ticket

printf("Ticket ID Removed Successfully!!\n\n");

ticketFound = 1;

}

}

if(!check2){

printf("\n\nNo Ticket ID Found...\n\n");

}

}

if(!check){

printf("\n\nPlease Enter Valid Nic Number.\n\n");

break;

}

}

}

}

}

else if(select\_Transport==4){

printf("\n\nBA BAYEEE!!!\n\n");

break;

}

else{

printf("\n\nPLEASE ENTER VALID COMMAND!\n\n");

}

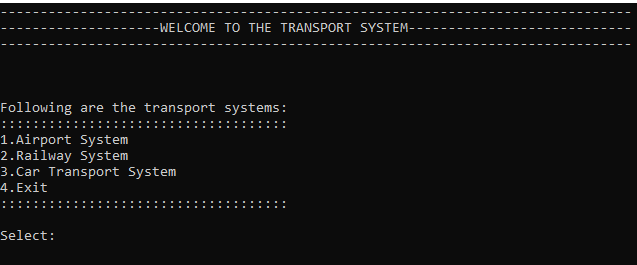
}

return 0;

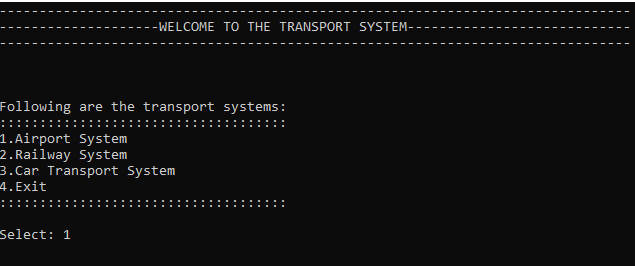
}

***5.Screen Shots:***

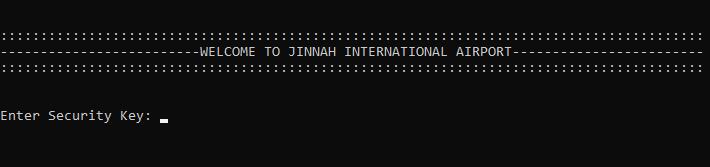
***First, Program will show you some transport systems and wait for you to select one of them.***

******

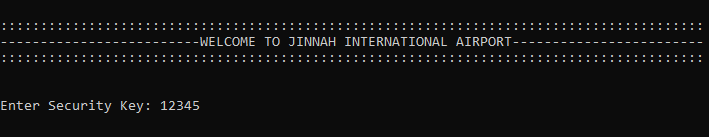
***Let’s select an Airport System.***

******

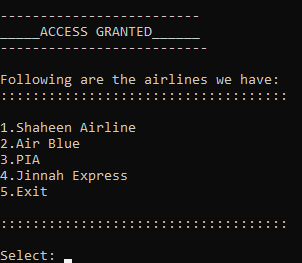
***Now, you have to enter a security key just like in real life police officers check your ID. SECURITY KEY = 12345***

******

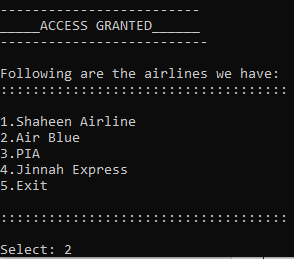
***Now let’s enter our security key.***

******

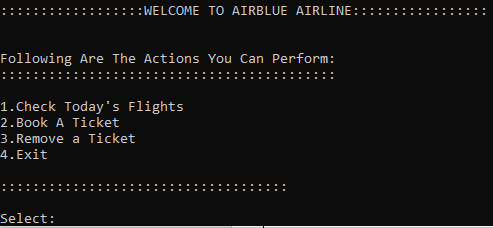
***After entering security key, Now you have an access to our airport system. You can select your favorite Airline.***

******

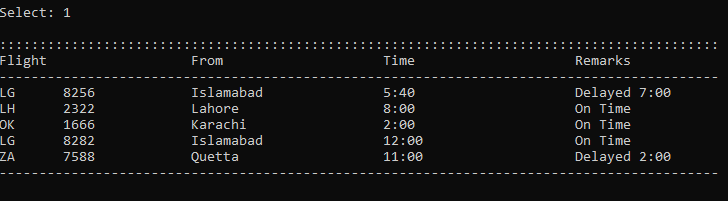
***Let’s select Airblue Airline.***

******

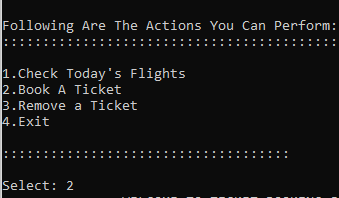
***Now you can book a ticket, remove a ticket also you can check today’s flights just like in real life.***

******

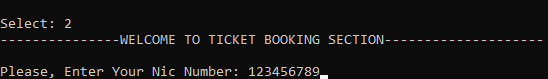
***First, let’s Check Today’s Flights by pressing 1.***

******

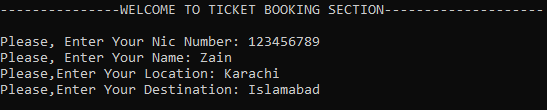
***Now, Let’s Book A Ticket by pressing 2.***

******

***Now, the program will ask you to enter Nic Number and you can only enter those number which is actually stored in a database of Nadra just like in real life. So for demo purpose I created a Nic Number 123456789 . If I enter a number other than that, program will show us a error that you entered invalid Nic number.***

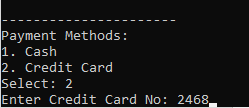
******

***After entering valid Nic Number, program will ask us to enter our name, location and destination. So let’s enter that info in it.***

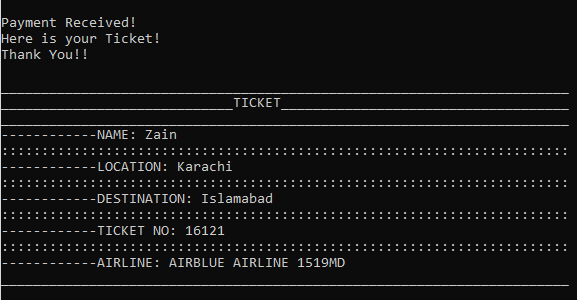
******

***If You Put destination like other than those countries that are not in database, It will show you an error that you’ve entered invalid destination.***

***After that, program will ask you about payment method. Let’s select credit card for this and you can enter only valid credit card numbers which are stored in our database that’s also a security feature in my program. CREDIT CARD NO: 2468***

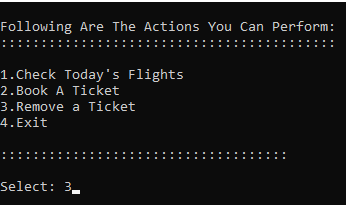
******

***After that, program will show you a ticket of your flight.***

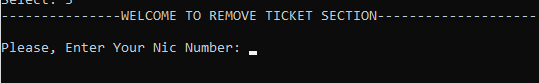
******

***Now as you can see we booked our ticket and now we have our ticket number which is 16121. Now let’s see how can we remove that ticket from Airblue database. Just like in real life people remove ticket.***

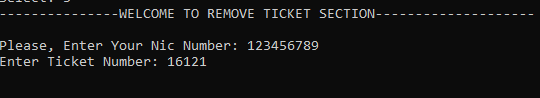
***Now let’s select Remove A Ticket by pressing 3.***

******

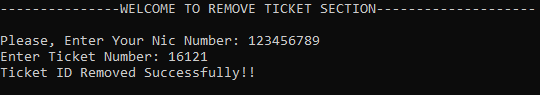
***After that, Program will ask you to enter Nic Number. 123456789***

******

***After entering Nic Number, if Nic Number is valid Program will ask you to enter Ticket No.***

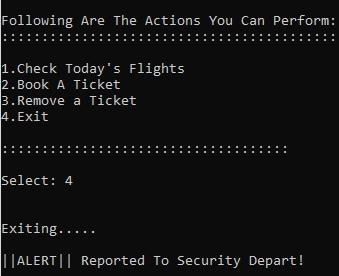
******

***If Ticket No is valid, Our program will remove your ticket but if your entered ticket number is not valid our program will show you a error that Ticket ID not found.***

******

***Boom! Ticket ID removed successfully because we have just registered our ticket 16121 and then we removed it from our database.***

***When you press 4 to exit, It will give you a alert that reported to security depart because in real life when we go to airport or railway station our activities can be seen by a camera . So like that I added this alert that Reported to security depart which means your activity inside the system is reported to security depart.***

******

***Same goes for Railway and Car Transport system!***

***I Hope You Like It!....***

***6.Conclusion:***

*The development of a versatile transport system using the C programming language is a remarkable achievement that demonstrates the power of software engineering in solving real-world challenges. This project provides users with the convenience of managing their travel plans through an integrated platform, encompassing airport, railway, and car transport systems. By offering features such as ticket booking, ticket removal, and real-time information on flights and trains, this system greatly enhances the user experience and simplifies the process of travel planning. As technology continues to advance, such innovative solutions pave the way for even more efficient and user-friendly systems in the future.*