PROJECT REPORT

Parking Database Management System

TABLE OF CONTENTS

SUMMARY

Overview of the project:

Managing parking in busy places like malls, hospitals, and office campuses can often be confusing and time-consuming. The Parking Database Management System aims to make this process simpler, faster, and more organized. This project uses the basic yet powerful concepts of the C programming language to create a system that can record and manage parking information efficiently.

The system offers two user-friendly options for customers: they can either interact with a staff member at the counter manually , or they can choose the Automatic Mode and access parking services independently using a QR code. In both cases, details such as entry time, type of vehicle, and available parking spots are handled automatically by the program. Customers receive a slip or message containing all the necessary information about their parking spot and charges.

When the customer exits, the system calculates the total amount to be paid based on the time the vehicle was parked, ensuring transparency and accuracy. The use of file handling also helps store and update data securely, making it easier for the management to keep track of records.

Overall, this project not only enhances the parking experience for users but also helps institutions operate more smoothly. It demonstrates how basic C programming concepts—like functions, loops, conditions, arrays, and pointers—can be combined to build a practical solution for a real-world problem.

Objectives:

- To make the parking process quicker and more convenient for customers by reducing manual effort and waiting time.
- To accurately record important details such as entry time, exit time, vehicle type, and parking slot availability.
- To provide two easy ways for customers to use the system—either with the help of an operator or independently through a QR-based automatic mode.
- To automatically calculate parking charges based on the duration of the stay, ensuring fairness and transparency.
- To maintain organized and secure records of all parking activities using file handling for future reference and management needs.
- To apply and demonstrate fundamental concepts of the C programming language in a practical, real-world application.
- To create a user-friendly system that can be used in various public places like hospitals, malls, and corporate offices.

INTRODUCTION

Background and Context:

In today's fast-growing cities, parking has become a major concern in crowded public spaces like malls, hospitals, and office complexes. People often waste a lot of time searching for an empty parking spot, waiting in queues, or dealing with misplaced parking records. These issues not only create inconvenience for customers but also make it difficult for organizations to manage space efficiently and maintain accurate data.

As technology continues to improve everyday services, automation in parking systems has become an essential step toward smarter infrastructure. A computerbased parking management system can help reduce errors, avoid confusion, and provide a smooth flow of vehicles. It can also support staff by handling timeconsuming tasks like keeping records, calculating charges, and checking spot availability.

This project, developed using the C programming language, aims to introduce a simple yet effective solution to these common parking problems. By combining digital record-keeping and automated features, the Parking Database Management System strives to make the parking experience more organized, transparent, and user-friendly for both customers and administrators.

Problem Statement:

In many public places, managing parking manually often leads to confusion, longer waiting times, and mismanagement of available spaces. Without a proper system, it becomes difficult to track vehicle entries, check slot availability, and calculate parking charges accurately. This not only causes inconvenience to customers but

also increases the workload on staff and can result in financial discrepancies for the organization.

To overcome these challenges, there is a need for a reliable and automated parking management system that can store and process data efficiently. The system should ensure smooth vehicle movement, quick access to information, and secure handling of parking records while minimizing human errors.

Scope of the Project:

The Parking Database Management System focuses on improving the parking experience for both users and administrators by automating essential tasks. The system covers the entire process—from a vehicle's entry to exit—by recording details like vehicle type, time of entry, parking slot availability, and final payment.

It is designed to work in two modes: Manual Mode, where staff at the counter assist customers, and Automatic Mode, where users can independently access the system through a QR code. The project also includes features like generating a parking slip or digital message for the customer and calculating charges based on the time spent in the parking area.

This system is suitable for various environments such as shopping malls, hospitals, and corporate offices. While the current version focuses on basic parking management using fundamental C programming concepts, it also lays the groundwork for future enhancements such as smart sensors and online slot booking. Overall, the project demonstrates how a simple software solution can help reduce errors, save time, and make parking operations more organized.

SYSTEM REQUIREMENTS

Functional Requirements:

The Parking Database Management System must perform the following functions to ensure smooth and efficient parking operations:

1. **User Mode Selection**

   The system should allow the customer to choose between Manual Mode and Automatic Mode at the time of entry.

2. **Vehicle Information Entry**

   It should record essential details such as the vehicle type (2-wheeler or 4wheeler) and entry time.

3. **Parking Slot Allocation**

   The system must check for available parking spaces and assign a suitable slot based on the vehicle type.

4. **Slip / Message Generation**

   After allocating a parking spot, the system should generate a slip or a digital message showing the parking slot, check-in time, and reference charges.

5. **Real-Time Updates**

   Parking slot availability must update automatically when a vehicle arrives or exits.

6. **Exit Processing**

   At the time of exit, the system should record or detect the exit time and calculate the total parking duration.

7. **Payment Calculation**

   The system should compute the final amount based on the duration of the stay and display the amount payable.

8. **Secure Payment Handling**

   The system should allow customers to select their payment mode. (Cash preferred in Manual Mode; digital-only in Automatic Mode.)

9. **Data Storage and Retrieval**

   File handling must be used to store all parking records and update them whenever a vehicle enters or exits.

10. **Smooth Navigation and Messaging**

    The interface should guide the user through each step and confirm successful payment and exit.

Non -Functional Requirements:

1.Usability

The system should be simple and user-friendly so that both customers and staff can operate it without difficulty. Clear instructions and smooth navigation must be provided throughout the process.

2.Performance

The system should respond quickly while checking slot availability, generating slips, and calculating charges, ensuring that customers do not face delays.

3.Accuracy

All time records, slot updates, and payment calculations must be precise to avoid confusion or financial errors.

4.Reliability

The system should consistently work without crashes or unexpected failures, especially during peak hours when parking activity is high.

5.Data Security

The system must securely store parking records using file handling so that data is not lost, misused, or tampered with.

6.Scalability

It should be able to handle more vehicles and additional features in the future, allowing expansion to larger parking areas or multiple locations.

7.Maintainability

The code should be well-structured so that future updates, fixes, or improvements can be made easily without affecting the existing functionality.

8.Compatibility

The system should run smoothly on different computers or devices commonly used at parking facilities.

DESIGN AND IMPLEMENTATION

Code snippets demonstrating the use of C concepts:

```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
#include <time.h>

// Project - Parking Managment System
// Table T1 -> 2 Wheeler vehicle
//Table T2 -> 4 Wheeler vehicles


//Table for Tower 1

typedef struct s1 {
    int sno;
    char date[20];
    char tower_no[5];
    int slot_no;
    char status[20];
    char carno[20];
    char contact_no[20];
    int enhour;
    int enmin;
} s1;

//Table for Tower 2

typedef struct s2 {
    int sno;
    char date[20];
    char tower_no[5];
    int slot_no;
    char status[20];
    char carno[20];
    char contact_no[20];
    int enhour;
    int enmin;
} s2;


void struct1(s1 T1[]);
void struct2(s2 T2[]);

// Functions defination

void save_T1(s1 T1[], int count) {
    FILE *fp = fopen("dat1.txt", "w");
    if (fp == NULL) {
        printf("Error opening file \n");
        return;
    }
```

```
52      for (int i = 0; i < count; i++) {
53
54
55          fprintf(fp, "%d %s %s %d %s %s %s %d %d\n",
56                  T1[i].sno,
57                  T1[i].date,
58                  T1[i].tower_no,
59                  T1[i].slot_no,
60                  T1[i].status,
61                  T1[i].carno,
62                  T1[i].contact_no,
63                  T1[i].enhour, // entry hour
64                  T1[i].enmin); // entry minutes
65      }
66
67      fclose(fp);
68      printf("T1 saved successfully to dat1.txt\n");
69  }
70
71  void save_T2(s2 T2[], int count) {
72      FILE *fp = fopen("dat2.txt", "w");
73      if (fp == NULL) {
74          printf("Error opening file \n");
75          return;
76      }
77
78
```

```
79      for (int i = 0; i < count; i++)
80          {
81          fprintf(fp, "%d %s %s %d %s %s %s %d %d\n",
82                  T2[i].sno,
83                  T2[i].date,
84                  T2[i].tower_no,
85                  T2[i].slot_no,
86                  T2[i].status,
87                  T2[i].carno,
88                  T2[i].contact_no,
89                  T2[i].enhour,
90                  T2[i].enmin);
91      }
92
93      fclose(fp);
94
95      printf("T2 saved successfully to dat2.txt \n");
96  }
97  // Function for EXIT TIME CALCULATION & SLIP GENERATION
98
99
100 void calc_rev(int checkin_h, int checkin_m, int checkout_h, int checkout_m) {
101
102     int entry_minutes = checkin_h * 60 + checkin_m;
103     int exit_minutes  = checkout_h * 60 + checkout_m;
104
105     int duration = exit_minutes - entry_minutes;
```

```c
    int duration = exit_minutes - entry_minutes;

    if (duration <= 0) {
        printf("Invalid time input\n");
        return;
    }

    int payment = 0;
    if (duration <= 60)
        payment = 50;
    else if (duration <= 180)
        payment = 80;
    else
        payment = 80 + (duration - 180) * 2;

    //Final SLIP GENERATED

    printf("\n------ PARKING PAYMENT  ------\n");
    printf("Entry Time : %d %d\n", checkin_h, checkin_m);
    printf("Exit Time  : %d %d\n", checkout_h, checkout_m);
    printf("Duration   : %d minutes\n", duration);
    printf("Payment    : %d\n", payment);
    printf("----------------------------\n");
}
```

```c
int main() {
    s1 T1[100];
    s2 T2[100];
    FILE *fptr;
    int a = 0;
    int b = 0;


   // MAIN MENU STARTED HERE
    for (int i = 0; i < 100; i++) {
        T1[i].sno = i + 1;
        strcpy(T1[i].date, "NA");
        strcpy(T1[i].tower_no, "T1");
        T1[i].slot_no = i + 1;
        strcpy(T1[i].status, "EMPTY");
        strcpy(T1[i].carno, "NA");
        strcpy(T1[i].contact_no, "NA");
        T1[i].enhour = 0;
        T1[i].enmin = 0;

        T2[i].sno = i + 1;
        strcpy(T2[i].date, "NA");
        strcpy(T2[i].tower_no, "T2");
        T2[i].slot_no = i + 1;
        strcpy(T2[i].status, "EMPTY");
        strcpy(T2[i].carno, "NA");
```

```
157         strcpy(T2[i].contact_no, "NA");
158         T2[i].enhour = 0;
159         T2[i].enmin = 0;
160     }
161
162     fptr = fopen("dat1.txt", "r");
163     if (fptr != NULL)
164         {
165         while (fscanf(fptr, "%d %19s %4s %d %19s %19s %19s %d %d",
166                       &T1[a].sno,
167                       T1[a].date,
168                       T1[a].tower_no,
169                       &T1[a].slot_no,
170                       T1[a].status,
171                       T1[a].carno,
172                       T1[a].contact_no,
173                       &T1[a].enhour,
174                       &T1[a].enmin ) == 9) {
175             a++;            int s1::enmin
176             if (a >= 100) break;
177         }
178         fclose(fptr);
179     } else {
180
181
182     }
183
```

```
184     fptr = fopen("dat2.txt", "r");
185
186     if (fptr != NULL) {
187         while (fscanf(fptr, "%d %19s %4s %d %19s %19s %19s %d %d",
188                       &T2[b].sno,
189                       T2[b].date,
190                       T2[b].tower_no,
191                       &T2[b].slot_no,
192                       T2[b].status,
193                       T2[b].carno,
194                       T2[b].contact_no,
195                       &T2[b].enhour,
196                       &T2[b].enmin) == 9) {
197             b++;
198             if (b >= 100) break;
199         }
200         fclose(fptr);
201     } else {
202
203
204     }
205
206     srand((unsigned int)time(NULL));
207
208     //Main Menue
209     int choice;
210     int i = 1;
```

```c
    int j = 1;
    while (j == 1) {
        printf("\n");
        printf("\n");

        printf(" \t ------------------------  PARKING MANAGEMENT SYSTEM  -----------------------------\n");
        printf("\n");
        printf("1. Admin Mode\n");
        printf("2. Manual Parking System\n");
        printf("3. Automatic Parking System\n");
        printf("4. Revenue Collection Report\n");
        printf("5. Exit \n");
        printf("\n");
        printf("Enter your choice: ");
        if (scanf("%d", &choice) != 1) {
            while (getchar() != '\n');
            continue;
        }

        switch (choice) {
            // ADMIN MODE

        case 1:
        {
            char pass[50];
            printf("\n");
            printf("ENTER PASSWORD   : ");
            scanf("%s", pass);
            // password = admin

            if (strcmp(pass, "admin") == 0)
            {
                struct1(T1);
                struct2(T2);
            }
            else
            {
                printf("\n");
                printf("wrong password\n");
                printf("Try Again \n");
                printf("\n");
            }

            break;
        }
        // Manual Parking System

        case 2:
```

```c
int t, slot, aslot;
while (1) {
    printf("Enter 2 wheeler or 4 wheeler (enter 2 or 4): ");
    if (scanf("%d", &t) != 1) { while (getchar() != '\n'); break; }

    if (t == 2) {
        for (int i = 0; i < 99; i++) {
            if (strcmp(T1[i].status, "EMPTY") == 0) {
                printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Mi
                    T1[i].sno, T1[i].date, T1[i].tower_no, T1[i].slot_no, T1[i].status, T1[i].carno, T1[i].contact_no, T1[i].enhour, T1[i].enmin);
            }
        }
        printf("Enter Slot no: ");
        scanf("%d", &slot);

        for (int j2 = 0; j2 < 99; j2++) {
            if (T1[j2].slot_no == slot) {
                aslot = slot - 1;
                break;
            }

        }

        //Customer details input for T1

        printf("Enter the following details:\n");
```

```
283             //Customer details input for T1
284
285             printf("Enter the following details:\n");
286
287             printf("ENTER THE DATE(DD-MM-YYYY): ");
288             scanf("%s", T1[aslot].date);
289
290             printf("Enter contact no: ");
291             scanf("%s", T1[aslot].contact_no);
292
293             strcpy(T1[aslot].status, "FULL");
294
295             printf("Enter car no: ");
296             scanf("%s", T1[aslot].carno);
297
298             printf("Enter entry hour: \n");
299             scanf("%d", &T1[aslot].enhour);
300
301             printf("Enter entry min: \n");
302             scanf("%d", &T1[aslot].enmin);
303
304             save_T1(T1, 99);
305
306             printf("Slot %d Updated Successfully \n\n", slot);
307         }
308
```

```
309 if (t == 4)
310 {
311     for (int i = 0; i < 99; i++) {
312         if (strcmp(T2[i].status, "EMPTY") == 0) {
313             printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Min : %
314                    T2[i].sno, T2[i].date, T2[i].tower_no, T2[i].slot_no, T2[i].status, T2[i].carno, T2[i].contact_no, T2[i].enhour, T2[i].enmin);
315         }
316     }
317     printf("Enter Slot no: ");
318     scanf("%d", &slot);
319
320     for (int j2 = 0; j2 < 99; j2++) {
321         if (T2[j2].slot_no == slot) {
322             aslot = slot - 1;
323             break;
324         }
325
326     }
327
328     //Customer details input for T2
329
330     printf("Enter the following details:\n");
331
332     printf("Enter date: \n");
```

```
332         printf("Enter date: \n");
333         scanf("%s", T2[aslot].date);
334
335         printf("Enter contact no: \n");
336         scanf("%s", T2[aslot].contact_no);
337
338         strcpy(T2[aslot].status, "FULL");
339
340         printf("Enter car no: ");
341         scanf("%s", T2[aslot].carno);
342
343         printf("Enter entry hour : \n");
344         scanf("%d", &T2[aslot].enhour);
345
346         printf("Enter entry min : \n");
347         scanf("%d", &T2[aslot].enmin);
348
349
350         save_T2(T2, 99);
351
352         printf("Slot %d Updated Successfully \n\n", slot);
353     }
354
355     {
356         int Ch;
```

```
358         printf("Enter 1 for yes \n");
359         printf("Enter 2 for no \n");
360         scanf("%d", &Ch);
361
362         if (Ch == 2) {
363             break;
364         }
365     }
366
367 ak;
368
369 MATIC PARKING SYSTEM
370 {
371 le(1){
372  int sensor = rand() % 2;
373 if (sensor == 1){
374         printf("\n");
375         printf("Vehicle detected at the entry gate \n");
376         printf("\n");
377
378
379         int t,slot,aslot;
380         while (1)
381         {
382             printf("Enter 2 wheeler or 4 wheeler (2/4): ");
383             if (scanf("%d", &t) != 1) { while (getchar() != '\n'); break; }
384
```

```
        if (t == 2) {
            for (int i = 0; i < 99; i++) {
                if (strcmp(T1[i].status, "EMPTY") == 0) {
                    printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Ent
                           T1[i].sno, T1[i].date, T1[i].tower_no, T1[i].slot_no, T1[i].status, T1[i].carno, T1[i].contact_no, T1[i].enhour, T1[i].enmin);
                }
            }
            printf("Enter Slot no: ");
            scanf("%d", &slot);

            for (int j2 = 0; j2 < 99; j2++) {
                if (T1[j2].slot_no == slot) {
                    aslot = slot - 1;
                    break;
                }
            }


            printf("Enter the following details:\n");

            printf("ENTER THE DATE: ");
            scanf("%s", T1[aslot].date);

            printf("Enter contact no: ");
            scanf("%s", T1[aslot].contact_no);
```

```
            strcpy(T1[aslot].status, "FULL");

            printf("Enter car no: ");
            scanf("%s", T1[aslot].carno);


            printf("Enter entry hour: \n");
            scanf("%d", &T1[aslot].enhour);

            printf("Enter entry min: \n");
            scanf("%d", &T1[aslot].enmin);


            save_T1(T1, 99);
            printf("Slot %d Updated Successfully\n\n", slot);
        }
```

```
if (t == 4)
{
    for (int i = 0; i < 99; i++) {
        if (strcmp(T2[i].status, "EMPTY") == 0) {
            printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Min : %
                   T2[i].sno, T2[i].date, T2[i].tower_no, T2[i].slot_no, T2[i].status, T2[i].carno, T2[i].contact_no, T2[i].enhour, T2[i].enmin);
        }
    }
    printf("Enter Slot no: ");
    scanf("%d", &slot);

    for (int j2 = 0; j2 < 99; j2++) {
        if (T2[j2].slot_no == slot) {
            aslot = slot - 1;
            break;
        }
    }


    printf("Enter the following details:\n");

    printf("ENTER THE DATE: ");
    scanf("%s", T2[aslot].date);
```

```
451     printf("Enter the following details:\n");
452
453     printf("ENTER THE DATE: ");
454     scanf("%s", T2[aslot].date);
455
456     printf("Enter contact no: ");
457     scanf("%s", T2[aslot].contact_no);
458
459     strcpy(T2[aslot].status, "FULL");
460
461     printf("Enter car no: ");
462     scanf("%s", T2[aslot].carno);
463
464
465     printf("Enter entry hour: \n");
466     scanf("%d", &T2[aslot].enhour);
467
468     printf("Enter entry min: \n");
469     scanf("%d", &T2[aslot].enmin);
470
471     save_T2(T2, 99);
472
473     printf("Slot %d Updated Successfully\n\n", slot);
474 }
475
476 break;
```

```
480         else{
481             printf("\n");
482             printf("SORRY \n");
483             printf("No vehicle detected \n");
484             printf("\n");
485         }
486         int Ch;
487         printf("Want to continue:\n ");
488         printf("Enter 1 for yes \n");
489         printf("Enter 2 for no \n");
490         scanf("%d", &Ch);
491         if (Ch == 2) {
492             break;
493         }
494     }
495     break;
496
497 / Revenue Collection Report
498 ase 4:
499
500     //exit
501
502     int x, eslot = -1;
503     int exhour, exmin;
504     char arr[30];
```

```
504     char arr[30];
505     printf("Enter 2 or 4 wheeler (2/4): ");
506     scanf("%d",&x);
507
508     if(x==2)
509     {
510         printf("Enter vehicle number: ");
511         scanf("%s", arr);
512         for(int i=0;i<99;i++){
513             if(strcmp(T1[i].carno, arr)==0){
514                 eslot = i;
515                 break;
516             }
517         }
518         if (eslot == -1) {
519             printf("Vehicle not found in T1\n");
520             break;
521         }
522         printf("Enter exit hour: \n");
523         scanf("%d", &exhour);
524
525         printf("Enter exit min: \n");
526         scanf("%d", &exmin);
527
```

```
522         printf("Enter exit hour: \n");
523         scanf("%d", &exhour);
524
525         printf("Enter exit min: \n");
526         scanf("%d", &exmin);
527
528
529         calc_rev(T1[eslot].enhour,T1[eslot].enmin, exhour,exmin);
530
531         strcpy(T1[eslot].contact_no, "NA");
532         strcpy(T1[eslot].carno, "NA");
533         strcpy(T1[eslot].date, "NA");
534         strcpy(T1[eslot].status, "EMPTY");
535         T1[eslot].enhour = 0;
536         T1[eslot].enmin = 0;
537
538         save_T1(T1, 99);
539
540         break;
541
542     }
543
544     if (x==4)
545     {
```

```
        printf("Enter vehicle number: ");
        scanf("%s", arr);
        for(int i=0;i<99;i++){
            if(strcmp(T2[i].carno, arr)==0){
                eslot = i;
                break;
            }
        }
        if (eslot == -1) {
            printf("Vehicle not found in T2\n");
            break;
        }
        printf("Enter exit hour: \n");
        scanf("%d", &exhour);

        printf("Enter exit min: \n");
        scanf("%d", &exmin);


        calc_rev(T2[eslot].enhour,T2[eslot].enmin , exhour, exmin);
        strcpy(T2[eslot].contact_no, "NA");
        strcpy(T2[eslot].carno, "NA");
        strcpy(T2[eslot].date, "NA");
        strcpy(T2[eslot].status, "EMPTY");
```

```
        T2[eslot].enhour = 0;
        T2[eslot].enmin = 0;

        save_T2(T2, 99);

        break;
    }


    break;

/ BREAK
ase 5:
    printf("-----------------------------------------------------------------------------------------------------------------------\n");
    printf("THANKYOU FOR USING OUR PARKING MANAGMENT SYSTEM\n");
    printf("-----------------------------------------------------------------------------------------------------------------------\n");

    return 0;
    break;


efault:
    printf("Invalid choice\n");
```

```
        }
    }
    return 0;
}

// display functions for both the structures
void struct1(s1 T1[]) {
    printf("\n\n");
    printf("-----------------------------------------------TABLE FOR T1-----------------------------------------------\n");
    printf("\n");
    for(int i=0;i<=99;i++){
        printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Min : %d\n",
               T1[i].sno, T1[i].date, T1[i].tower_no, T1[i].slot_no, T1[i].status, T1[i].carno, T1[i].contact_no, T1[i].enhour, T1[i].enmin);
        printf("\n");
    }
    printf("-----------------------------------------------------------------------------------------------------------------\n");
}

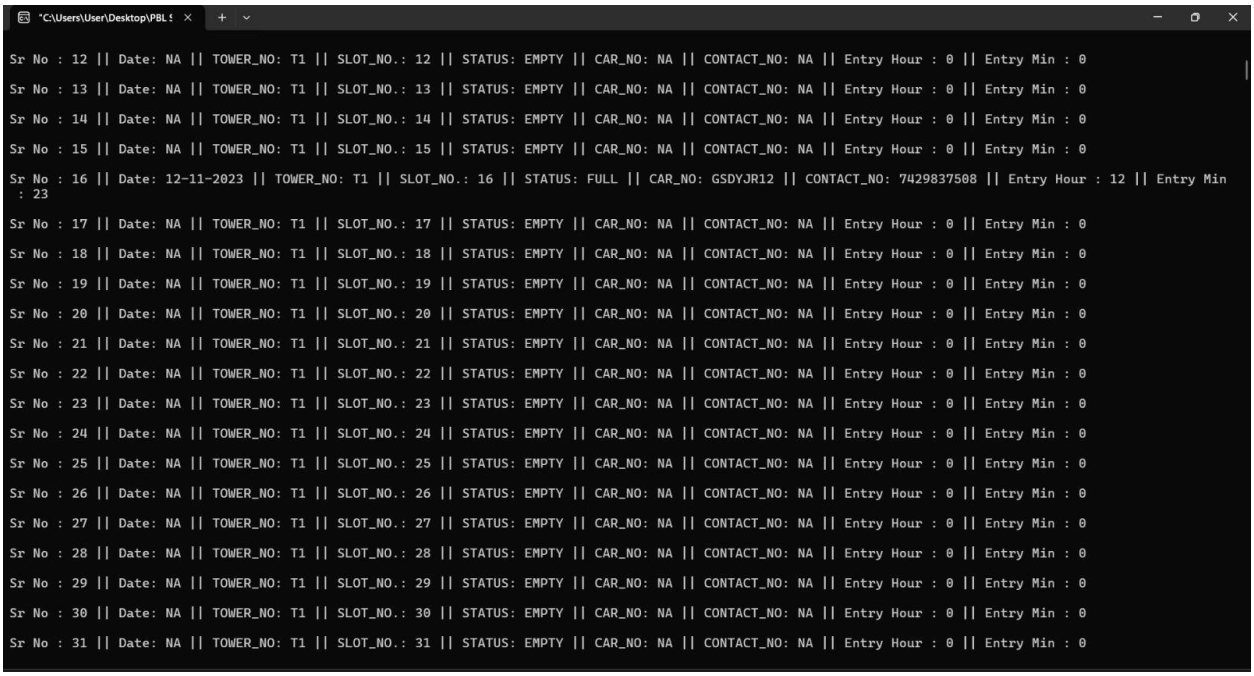
void struct2(s2 T2[]) {
    printf("\n\n");
    printf("-----------------------------------------------TABLE FOR T2-----------------------------------------------\n");
    printf("\n");
    for(int i=0;i<=99;i++){
        printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Min : %d \n"
               T2[i].sno, T2[i].date, T2[i].tower_no, T2[i].slot_no, T2[i].status, T2[i].carno, T2[i].contact_no, T2[i].enhour, T2[i].enmin);
        printf("\n");
    }
```

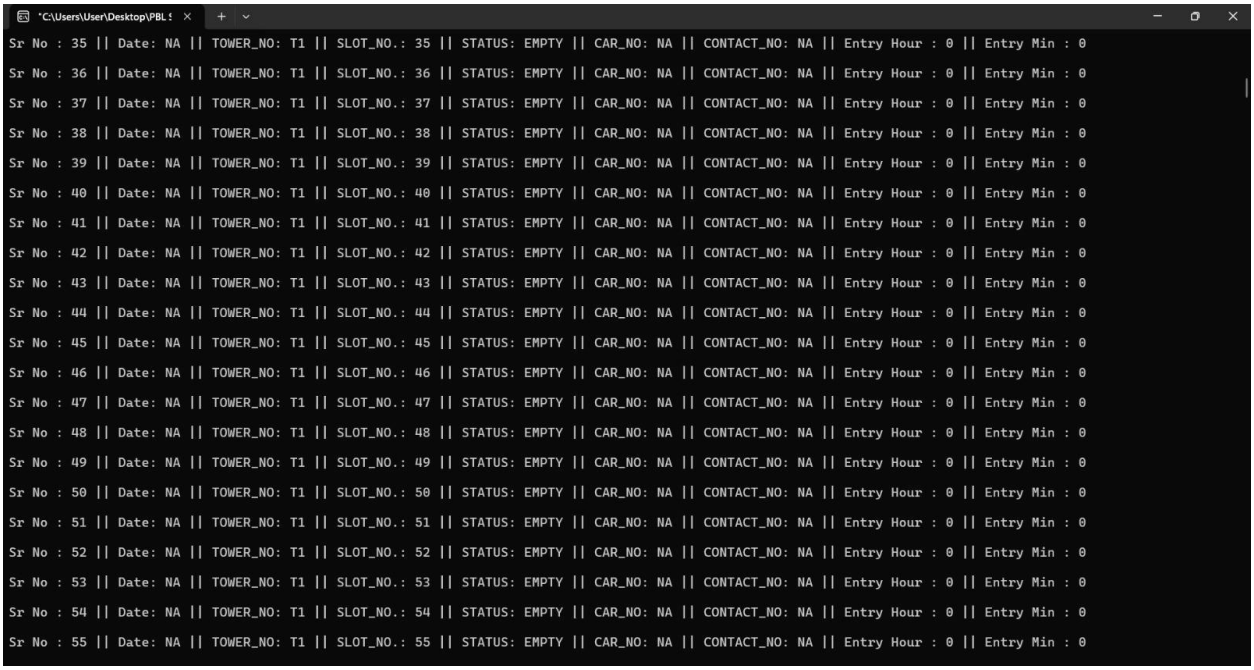
```
}

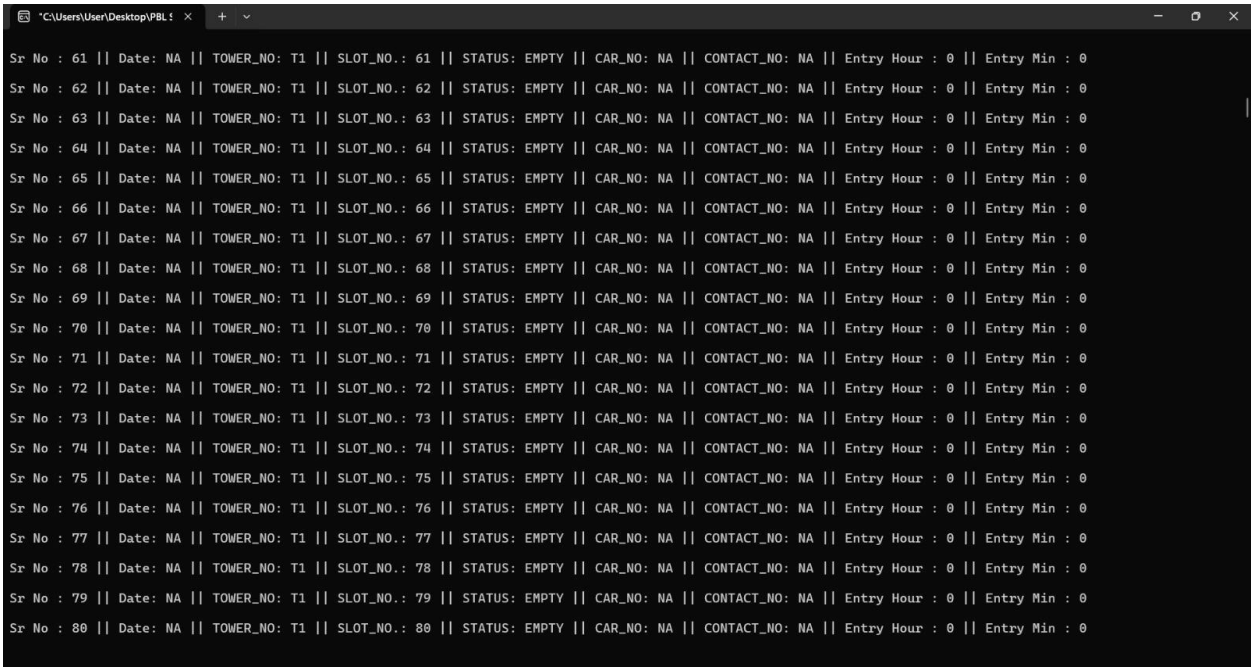
void struct2(s2 T2[]) {
    printf("\n\n");
    printf("-----------------------------------------------TABLE FOR T2-----------------------------------------------\n");
    printf("\n");
    for(int i=0;i<=99;i++){
        printf("Sr No : %d || Date: %s || TOWER_NO: %s || SLOT_NO.: %d || STATUS: %s || CAR_NO: %s || CONTACT_NO: %s || Entry Hour : %d || Entry Min : %d \n"
               T2[i].sno, T2[i].date, T2[i].tower_no, T2[i].slot_no, T2[i].status, T2[i].carno, T2[i].contact_no, T2[i].enhour, T2[i].enmin);
        printf("\n");
    }
    printf("-----------------------------------------------------------------------------------------------------------------\n");
}
```

Output screenshots with description:

- **Here we are running the code in admin mode .**






"C:\Users\User\Desktop\PBL
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Sr No : 67 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 67 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 71 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 71 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 72 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 72 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 73 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 73 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 74 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 74 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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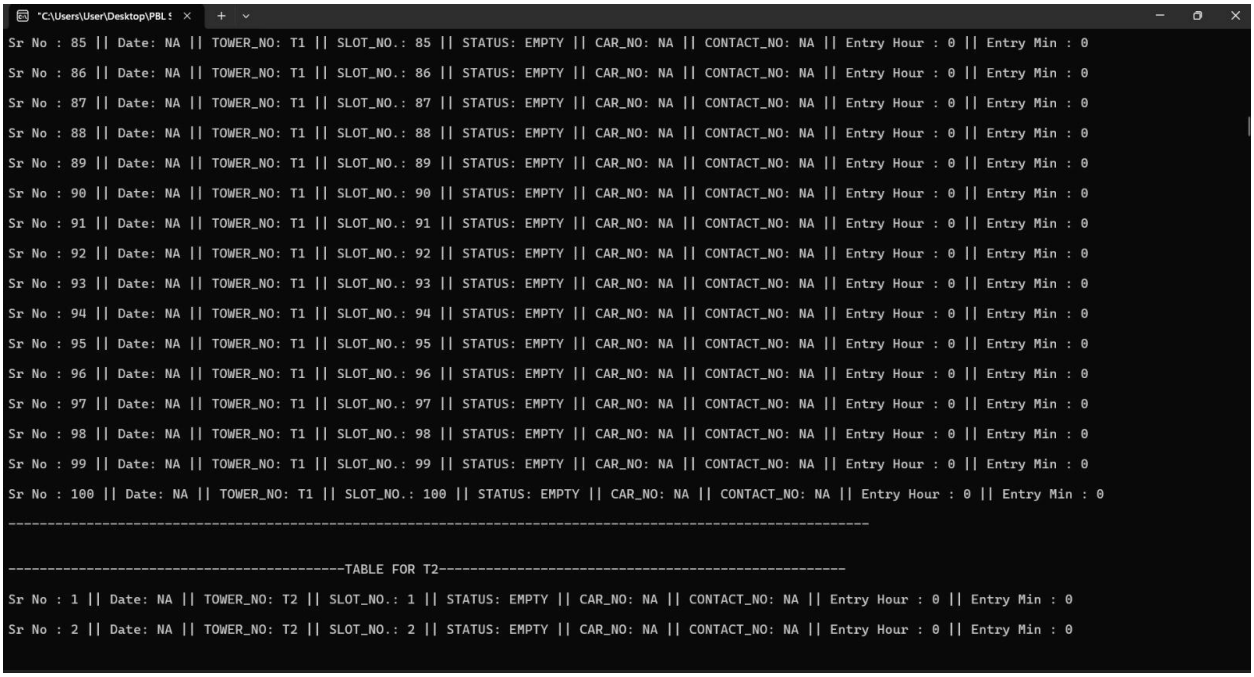
Sr No : 79 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 79 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 80 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 80 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0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Sr No : 88 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 88 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 89 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 89 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 93 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 93 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 94 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 94 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 95 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 95 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 96 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 96 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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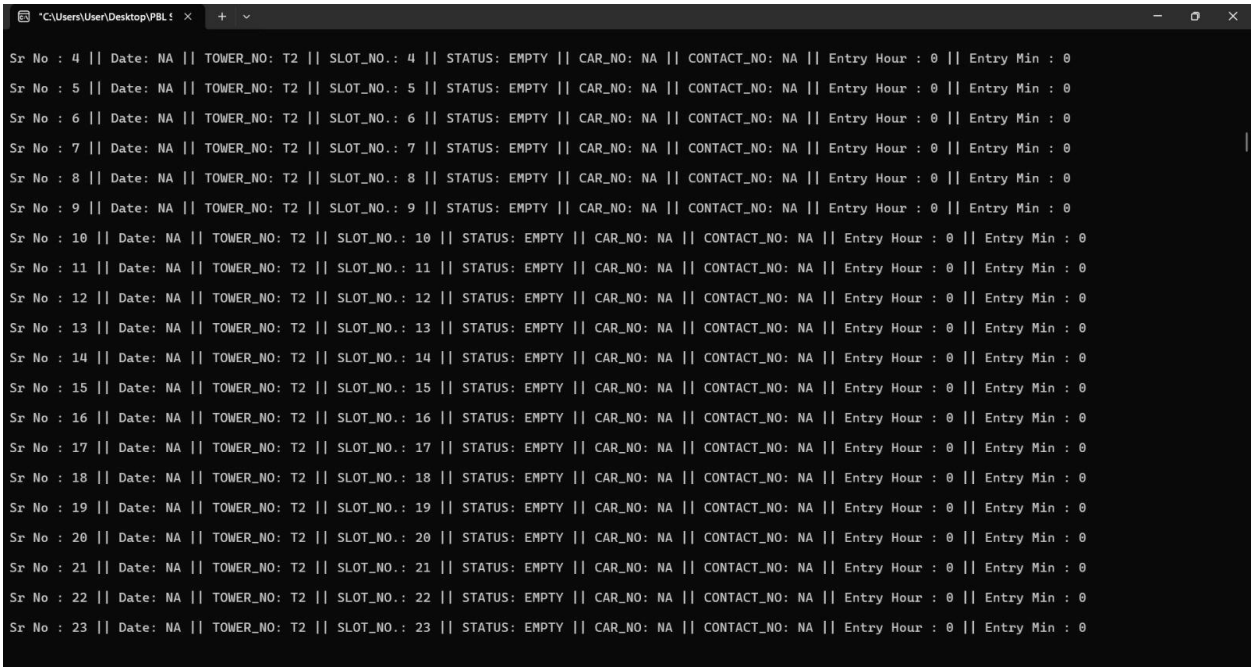
Sr No : 98 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 98 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 99 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 99 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 100 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 100 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0

----------TABLE FOR T2----------
Sr No : 1 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 1 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 2 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 2 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0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Sr No : 5 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 5 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 6 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 6 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 7 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 7 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 8 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 8 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 9 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 9 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 10 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 10 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 11 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 11 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 12 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 12 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 13 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 13 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 14 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 14 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 15 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 15 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 16 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 16 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 17 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 17 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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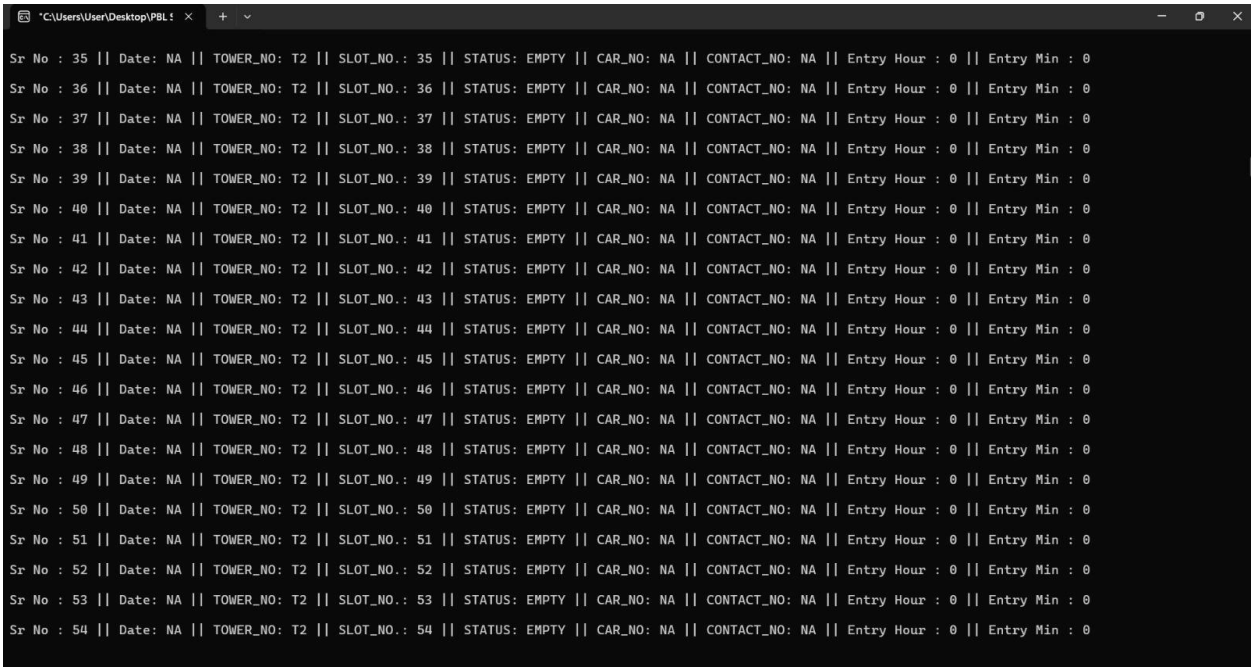
Sr No : 19 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 19 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 20 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 20 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 21 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 21 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 22 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 22 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 23 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 23 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0


"C:\Users\User\Desktop\PBL
Sr No : 35 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 35 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 36 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 36 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 37 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 37 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 38 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 38 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 39 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 39 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 40 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 40 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 41 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 41 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 42 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 42 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 43 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 43 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 44 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 44 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 46 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 46 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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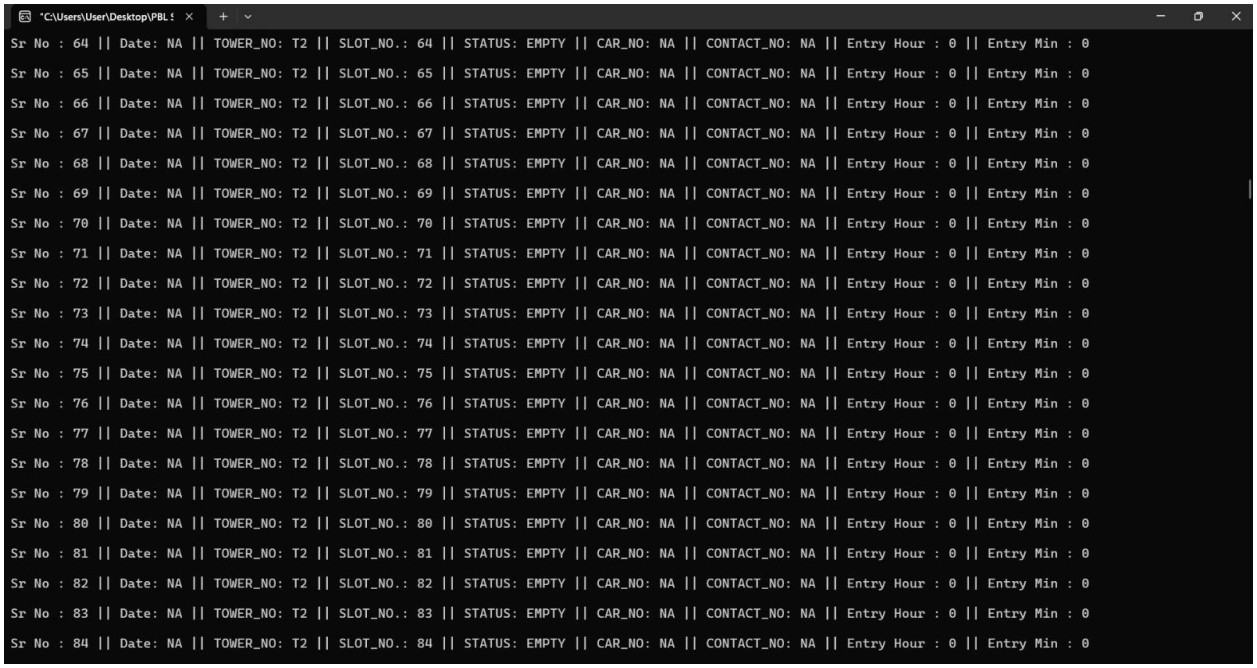
Sr No : 54 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 54 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0



- **Manual mode chosen and we can see all empty slots now we will update the slots .**

```
        ------------------------  PARKING MANAGEMENT SYSTEM  -------------------------------

1. Admin Mode
2. Manual Parking System
3. Automatic Parking System
4. Revenue Collection Report
5. Exit

Enter your choice: 2
Enter 2 wheeler or 4 wheeler (enter 2 or 4): 2
Sr No : 1 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 1 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NAA || Entry Hour : 0 || Entry Min : 0
Sr No : 2 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 2 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 3 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 3 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 4 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 4 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 5 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 5 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 6 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 6 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 7 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 7 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 8 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 8 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 9 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 9 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 10 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 10 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 11 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 11 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 12 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 12 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 13 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 13 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 14 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 14 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 15 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 15 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 17 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 17 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 18 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 18 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
```

```
Sr No : 19 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 19 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 20 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 20 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 21 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 21 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 22 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 22 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 23 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 23 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 24 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 24 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 25 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 25 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 26 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 26 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 27 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 27 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 28 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 28 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 29 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 29 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 31 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 31 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 32 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 32 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 33 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 33 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 34 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 34 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 35 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 35 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 36 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 36 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 37 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 37 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 38 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 38 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 39 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 39 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 40 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 40 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 41 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 41 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 42 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 42 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 43 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 43 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 44 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 44 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 45 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 45 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 46 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 46 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 47 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 47 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 48 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 48 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 49 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 49 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 50 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 50 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 51 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 51 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 52 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 52 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 53 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 53 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 54 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 54 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 55 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 55 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 56 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 56 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 57 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 57 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 58 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 58 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 59 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 59 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 60 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 60 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 61 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 61 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 62 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 62 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 63 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 63 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 64 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 64 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 65 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 65 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 66 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 66 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 67 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 67 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 68 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 68 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 69 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 69 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 70 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 70 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 71 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 71 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 72 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 72 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 73 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 73 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 74 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 74 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 75 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 75 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 76 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 76 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 77 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 77 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 78 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 78 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 79 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 79 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 80 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 80 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 81 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 81 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 82 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 82 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 83 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 83 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 84 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 84 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 85 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 85 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 86 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 86 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 87 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 87 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 88 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 88 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 89 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 89 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 90 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 90 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 91 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 91 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 92 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 92 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 93 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 93 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 94 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 94 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 95 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 95 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 96 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 96 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 97 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 97 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 98 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 98 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 99 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 99 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
```

```
Sr No : 96 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 96 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 97 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 97 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 98 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 98 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 99 || Date: NA || TOWER_NO: T1 || SLOT_NO.: 99 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Enter Slot no: 1
Enter the following details:
ENTER THE DATE(DD-MM-YYYY): 12-11-25
Enter contact no: 9834789038
Enter car no: DL45AB1007
Enter entry hour:
12
Enter entry min:
07
T1 saved successfully to dat1.txt
Slot 1 Updated Successfully

Want to continue:
 Enter 1 for yes
Enter 2 for no
2
```

- **Here we can see the updated records**

```
        ------------------------  PARKING MANAGEMENT SYSTEM  -----------------------------

1. Admin Mode
2. Manual Parking System
3. Automatic Parking System
4. Revenue Collection Report
5. Exit

Enter your choice: 1

ENTER PASSWORD   : admin


-------------------------------------------TABLE FOR T1-------------------------------------------------

Sr No : 1 || Date: 12-11-25 || TOWER_NO: T1 || SLOT_NO.: 1 || STATUS: FULL || CAR_NO: DL45AB1007 || CONTACT_NO: 9834789038 || Entry Hour : 12 || Entry Min :
 7
```

- **Automatic mode chosen here**

```
------------------------------------------------------------------------------------------------------------------------


        ------------------------  PARKING MANAGEMENT SYSTEM  ------------------------------

1. Admin Mode
2. Manual Parking System
3. Automatic Parking System
4. Revenue Collection Report
5. Exit

Enter your choice: 3

Vehicle detected at the entry gate

Enter 2 wheeler or 4 wheeler (2/4): 4
Sr No : 1 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 1 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 2 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 2 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 3 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 3 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 4 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 4 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 5 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 5 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 6 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 6 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 7 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 7 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 8 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 8 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 9 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 9 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 10 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 10 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 11 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 11 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 12 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 12 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 13 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 13 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 14 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 14 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 15 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 15 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 16 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 16 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 17 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 17 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 18 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 18 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 19 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 19 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 20 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 20 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 21 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 21 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 22 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 22 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 23 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 23 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 24 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 24 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 25 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 25 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 15 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 15 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 16 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 16 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 17 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 17 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 18 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 18 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 20 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 20 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 21 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 21 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 22 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 22 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 23 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 23 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 24 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 24 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 27 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 27 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 28 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 28 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 29 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 29 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 30 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 30 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 31 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 31 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 32 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 32 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 33 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 33 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 35 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 35 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 36 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 36 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 37 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 37 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 40 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 40 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 42 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 42 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 44 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 44 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 46 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 46 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 49 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 49 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 50 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 50 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 51 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 51 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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Sr No : 53 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 53 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 54 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 54 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
Sr No : 55 || Date: NA || TOWER_NO: T2 || SLOT_NO.: 55 || STATUS: EMPTY || CAR_NO: NA || CONTACT_NO: NA || Entry Hour : 0 || Entry Min : 0
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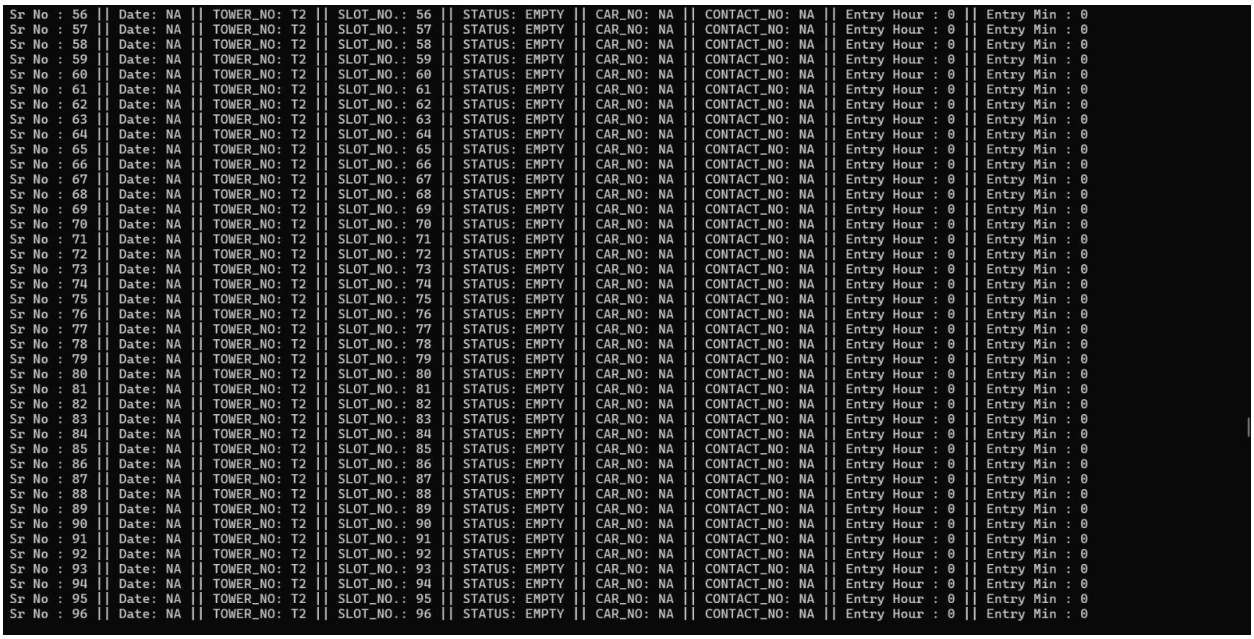
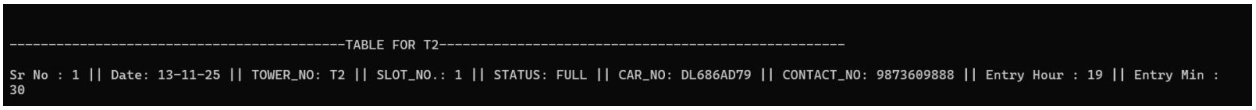


- **Slot updated**



- **Revenue is calculated**

```
        ------------------------  PARKING MANAGEMENT SYSTEM  ------------------------------

1. Admin Mode
2. Manual Parking System
3. Automatic Parking System
4. Revenue Collection Report
5. Exit

Enter your choice: 4
Enter 2 or 4 wheeler (2/4): 2
Enter vehicle number:  DL45AB1007
Enter exit hour:
13
Enter exit min:
23

------ PARKING BILL ------
Entry Time : 12 07
Exit Time  : 13 23
Duration   : 76 minutes
Payment    : 80
--------------------------
T1 saved successfully to dat1.txt
```

- **We have finally exited the program**

```
        ------------------------  PARKING MANAGEMENT SYSTEM  ------------------------------

1. Admin Mode
2. Manual Parking System
3. Automatic Parking System
4. Revenue Collection Report
5. Exit

Enter your choice: 5
--------------------------------------------------------------------------------------------------------------------
THANKYOU FOR USING OUR PARKING MANAGMENT SYSTEM
--------------------------------------------------------------------------------------------------------------------

Process returned 0 (0x0)   execution time : 372.398 s
Press any key to continue.
```

CONCLUSION

Summary & achievement of Objectives:

The Parking Database Management System successfully streamlines the entire parking process from entry to exit. By using basic C programming concepts, the project achieves its main objectives—reducing waiting time, improving accuracy in slot allocation, and making the overall parking experience more organized. The system allows both manual and automatic access, calculates parking charges based on duration, and stores all records securely through file handling. With its simple interface and automated operations, the system proves effective in minimizing human errors and ensuring smooth parking management in busy locations such as malls, hospitals, and corporate offices.

Overall, the project demonstrates how technology can be used in a practical way to help solve real-life problems while fulfilling all the goals set at the beginning of the development.

Future Work and Recommendations:

Although the current version of the Parking Database Management System meets its basic purpose, there are many possibilities for future improvement. The system could be enhanced with features like real-time sensor-based detection of occupied and vacant slots, online booking of parking spaces, and integration with mobile apps for even faster and more convenient access. Adding digital payment gateways and security features such as vehicle number plate recognition could further improve efficiency and safety.

With more advanced programming techniques and the use of modern technologies, this system can evolve into a complete smart parking solution suitable for large-scale parking facilities and smart cities.

REFERENCES

List of all sources cited in the report:

1) Research articles and online resources on parking management and automation for conceptual understanding.

2) www.geeksforgeeks.org -C Programming Concepts and Examples

3) www.studytonight.com -File Handling in C and Other Core Concepts