

# STUDENTS ATTENDANCE MONITORING

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

```
struct Attendance{
```

```
    int studentID;
```

```
    char date[15];
```

```
    "2025-08-04"
```

```
    char status;
```

```
    Absent
```

```
    struct Attendance *next;
```

```
};
```

```
(
struct Attendance * createNode(int id, char * date,
char status) {
```

```
    struct Attendance *
```

```
    newNode = (struct Attendance *) malloc sizeof
```

```
(struct Attendance);
```

```
    newNode->studentID = id;
```

```
    strcpy (newNode->date, date);
```

```
    newNode->status = status;
```

```
    newNode->next = NULL;
```

```
    return newNode;
```

```
}
```



```
Void add Attendance (struct Attendance * *head, int id,  
char * date, char status) {
```

```
    struct Attendance *newNode = createNode(id,  
date, status);
```

```
    newNode->next = *head;
```

```
    *head = newNode;
```

```
    printf ("Attendance added.\n");
```

```
}
```

```
Void deleteAttendance (struct Attendance * *head, int id,  
char * date) {
```

```
    struct Attendance *temp = *head, *prev = NULL;
```

```
    while (temp != NULL && !
```

```
(temp->StudentID == id && strcmp
```

```
(temp->date, date) == 0)) {
```

```
        prev = temp;
```

```
        temp = temp->next;
```

```
}
```

```
if (temp == NULL)
```

```
{
```

```
    printf ("Record not found.\n");
```

```
    return;
```

```
}
```

```

if (p1er == NULL)
    *head = temp->next;
free (1
else
    p1er->next = temp->next;
    free(temp);
    printf("Record deleted.\n");
}

```

void Search Attendance (struct Attendance \*head,  
int id, char \*date)

```

{
    while (head != NULL)
    {
        if (head->studentID == id & strcmp
            (head->date, date) == 0) {
            printf ("Found: student %d on %s = %c\n",
                id, date, head->Status);
            return;
        }
        head = head->next;
    }
    printf ("Record not found.\n")
}

```



```
Void displayReverse (struct Attendance *head)
```

```
{
```

```
if (head == NULL) return;
```

```
displayReverse (head->next);
```

```
printf ("%d %s %c\n", head->studentID,
```

```
head->date, head->Status);
```

```
}
```

```
int main() {
```

```
struct Attendance * head = NULL;
```

```
int choice, id;
```

```
char date [15], Status;
```

```
while(1) {
```

```
printf ("\n--- Attendance System ---\n");
```

```
printf ("1. Add Attendance\n 2
```

```
Delete Attendance\n
```

```
3. Search Attendance\n
```

```
4. Display by date\n
```

```
5. Reverse Display\n
```

```
6. Exit\n
```

```
choose:");
```

```
scanf ("%d", &choice);
```

```
if (choice == 1) {
```

```
printf ("enter studentID
```



```

    Date [VVVV-MM-DD] Status (P/A):");
    scanf ("%d %s %c", &id, date, &status);
    addAttendance (&head, id, date, status);
}
else if (choice == 2)
{
    printf ("Enter Student ID and Date to delete.");
    scanf ("%d %s", &id, date);
    SearchAttendance (&head, id, date);
}
else if (choice == 3)
{
    printf ("Enter Date to display:");
    scanf ("%s", date);
    displayByDate (&head, date);
}
else if (choice == 4)
{
    printf ("Reverse Display: \n");
    displayReverse (&head);
}
else if (choice == 5)
{
    printf ("Invalid choice! \n");
}
return 0; }

```



main.c

Output



```
--- Attendance System ---
```

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

```
Choose: 1
```

```
Enter StudentID Date(YYYY-MM-DD) Status(P  
/A): 101 2025-08-24 P
```

```
Attendance added.
```

```
--- Attendance System ---
```

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

```
Choose: 1
```

```
Enter StudentID Date(YYYY-MM-DD) Status(P  
/A): 102 2025-08-24 A
```

```
Attendance added.
```

```
--- Attendance System ---
```

1. Add Attendance



main.c

Output



Choose: 1

Enter StudentID Date(YYYY-MM-DD) Status(P  
/A): 101 2025-08-24 P  
Attendance added.

--- Attendance System ---

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

Choose: 1

Enter StudentID Date(YYYY-MM-DD) Status(P  
/A): 102 2025-08-24 A  
Attendance added.

--- Attendance System ---

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

Choose: 4

Enter Date to display: 2025-08-24

Student 102 : A

Student 101 : P





main.c

Output



```
--- Attendance System ---
```

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

Choose: 3

Enter StudentID and Date to search: 101  
2025-08-24

Found: Student 101 on 2025-08-24 = P

```
--- Attendance System ---
```

1. Add Attendance
2. Delete Attendance
3. Search Attendance
4. Display by Date
5. Reverse Display
6. Exit

Choose: 2

Enter StudentID and Date to delete: 101  
2025-08-24

Record deleted.

```
--- Attendance System ---
```

1. Add Attendance





main.c

Output



3. Search Attendance

4. Display by Date

5. Reverse Display

6. Exit

Choose: 4

Enter Date to display: 2025-08-24

Student 102 : A

--- Attendance System ---

1. Add Attendance

2. Delete Attendance

3. Search Attendance

4. Display by Date

5. Reverse Display

6. Exit

Choose: 5

Reverse Display:

102 | 2025-08-24 | A

--- Attendance System ---

1. Add Attendance

2. Delete Attendance

3. Search Attendance

4. Display by Date

5. Reverse Display

6. Exit

Choose: 6

Exit

# GITHUB LINK

<https://github.com/Janani-Enginner/code.git>