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

#define MAX_BOOKS 100

struct book {
    char title[50];
    char author[50];
    int year_published;
    int num_pages;
};

struct book library[MAX_BOOKS];
int num_books = 0;

void add_book() {
    if (num_books < MAX_BOOKS) {
        struct book new_book;
        printf("Enter book title: ");
        scanf("%s", new_book.title);
        printf("Enter book author: ");
        scanf("%s", new_book.author);
        printf("Enter year published: ");
        scanf("%d", &new_book.year_published);
        printf("Enter number of pages: ");
        scanf("%d", &new_book.num_pages);
        library[num_books] = new_book;
        num_books++;
        printf("Book added successfully.\n");
    } else {
        printf("Library is full. Cannot add more books.\n");
    }
```

esources | Compile Log | Debug | Find Results | Console | Close

```
- Errors: 0
- Warnings: 0
- Output Filename: C:\Users\LOKESH\AppData\Local\Microsoft\Windows\INetCache\IE
- Output Size: 325.810546875 KiB
- Compilation Time: 0.20s
```

C:\Users\LOKESH\AppData\Lc

```
2. Display book details
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter your choice: 2
Library is empty.

Library Management System
1. Add book details
2. Display book details
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter your choice: 3
Enter author name: tharun
No books found for author tharun.

Library Management System
1. Add book details
2. Display book details
3. List all books of given author
4. List the count of books in the library
5. Exit
Enter your choice: 5
Exiting Library Management System. Thank you for using!

registration number:192211541
--------------------------------
Process exited after 27.73 seconds with return value 0
Press any key to continue . . .
```

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

struct student {
   int roll_no;
   char stud_name[50];
   int mark1, mark2, mark3;
   int total_marks;
   float avg_marks;
};

void main() {
   int i, j, n;
   struct student temp, s[100];
   printf("Enter the number of students: ");
   scanf("%d", &n);

   for(i=0; i<n; i++) {
      printf("\nEnter the roll number of student %d: ", i+1);
      scanf("%d", &s[i].roll_no);

      printf("Enter the name of student %d: ", i+1);
      scanf("%s", s[i].stud_name);

      printf("Enter the marks of student %d (mark1 mark2 mark3): ", i+1);
      scanf("%d %d %d", &s[i].mark1, &s[i].mark2, &s[i].mark3);

      s[i].total_marks = s[i].mark1 + s[i].mark2 + s[i].mark3;
      s[i].avg_marks = s[i].total_marks / 3.0;
   }
   public int __cdecl printf (const char * __restrict__ _Format, ...)
   for(i=0; i<n-1; i++) {
```

ources | Compile Log | Debug | Find Results | Console | Close

```
C:\Users\LOKESH\AppData\Lc

Enter the number of students: 2

Enter the roll number of student 1: 5
Enter the name of student 1: 6
Enter the marks of student 1 (mark1 mark2 mark3): 66
22
3

Enter the roll number of student 2: 66
Enter the name of student 2: 55
Enter the marks of student 2 (mark1 mark2 mark3): 22
66
11


Student details arranged in descending order of marks:
Roll No.        Name            Mark 1  Mark 2  Mark 3  Total   Avg
66              55              22      66      11      99      33.00
5               6               66      22      3       91      30.33

registration number:192211541
--------------------------------
Process exited after 24.19 seconds with return value 30
Press any key to continue . . .
```

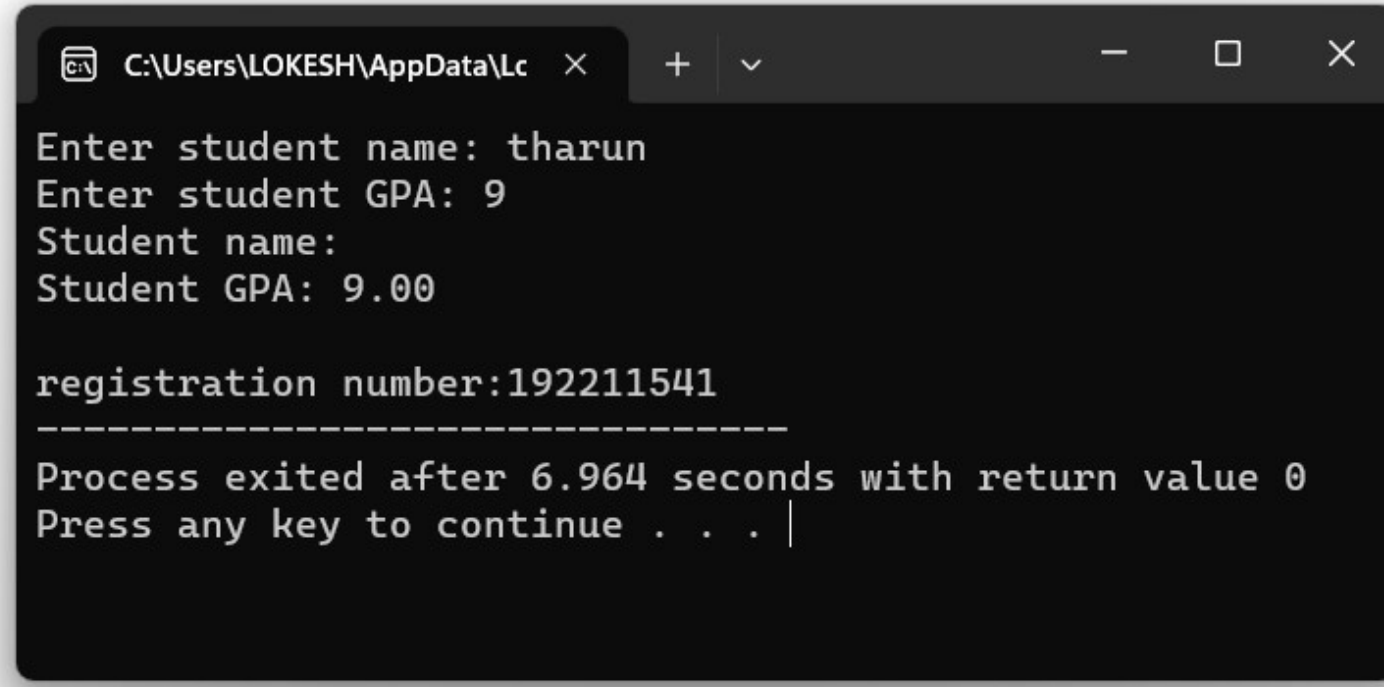
```c
#include <stdio.h>
#define MAX_PLAYERS 11
struct player {
    char name[50];
    int runs_scored;
    int balls_faced;
    float batting_average;
};
int main() {
    struct player team[MAX_PLAYERS];
    int num_players;

    printf("Enter the number of players in the team (max %d): ", MAX_PLAYERS);
    scanf("%d", &num_players);

    for (int i = 0; i < num_players; i++) {
        printf("\nPlayer %d:\n", i + 1);

        printf("Enter the player's name: ");
        scanf("%s", team[i].name);

        printf("Enter the runs scored by the player: ");
        scanf("%d", &team[i].runs_scored);

        printf("Enter the number of balls faced by the player: ");
        scanf("%d", &team[i].balls_faced);

        if (team[i].balls_faced > 0) {
            team[i].batting_average = (float) team[i].runs_scored / team[i].bal
        } else {
    public int __cdecl printf (const char * __restrict__ _Format, ...)
        }
```

```
C:\Users\LOKESH\Documents'
Enter the number of players in the team (max 11): 2

Player 1:
Enter the player's name: madhankumar
Enter the runs scored by the player: 100
Enter the number of balls faced by the player: 1

Player 2:
Enter the player's name: tharun
Enter the runs scored by the player: 50
Enter the number of balls faced by the player: 2

Batting information of the team:
Name                Runs Scored     Balls Faced     Batting Av
erage
madhankumar         100             1               10000.00
tharun              50              2               2500.00

registration number:192211541
--------------------------------
Process exited after 28.34 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>

struct employee {
    int emp_id;
    char name[50];
    char designation[50];
    char department[50];
    float salary;
};

int main() {
    struct employee emp;

    printf("Enter employee details:\n");
    printf("Employee ID: ");
    scanf("%d", &emp.emp_id);
    printf("Name: ");
    scanf("%s", emp.name);
    printf("Designation: ");
    scanf("%s", emp.designation);
    printf("Department: ");
    scanf("%s", emp.department);
    printf("Salary: ");
    scanf("%f", &emp.salary);

    printf("\nEmployee details:\n");
    printf("Employee ID: %d\n", emp.emp_id);
    printf("Name: %s\n", emp.name);
    printf("Designation: %s\n", emp.designation);
    printf("Department: %s\n", emp.department);
    printf("Salary: %.2f\n", emp.salary);
    printf("enter the register number 192211541");
```

```
C:\Users\LOKESH\AppData\Lc
Enter employee details:
Employee ID: 276
Name: pathy
Designation: manager
Department: production
Salary: 30000

Employee details:
Employee ID: 276
Name: pathy
Designation: manager
Department: production
Salary: 30000.00
enter the register number 192211541
--------------------------------
Process exited after 45.48 seconds with return value
 0
Press any key to continue . . .
```

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

#define MAX_NAME_LENGTH 50

union student {
    char name[MAX_NAME_LENGTH];
    float gpa;
};

int main() {
    union student s;
    printf("Enter student name: ");
    fgets(s.name, MAX_NAME_LENGTH, stdin);
    s.name[strcspn(s.name, "\n")] = '\0';
    printf("Enter student GPA: ");
    scanf("%f", &s.gpa);
    printf("Student name: %s\n", s.name);
    printf("Student GPA: %.2f\n", s.gpa);
    printf("\nregistration number:192211541");
    public int __cdecl printf (const char * __restrict__ _Format, ...)
}
```

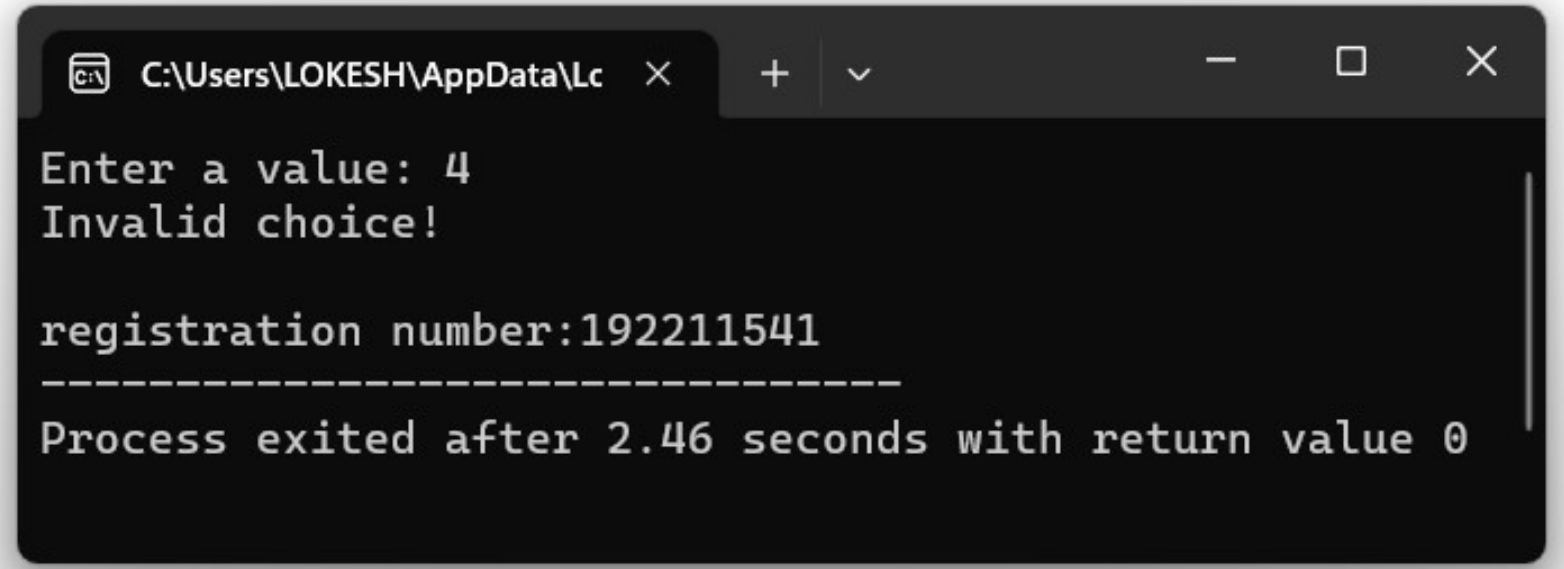


```c
#include <stdio.h>


union shape {
    float radius;
    struct {
        float length;
        float width;
    } rect;
};

int main() {
    union shape s;
    char shape_type;
    float area;

    printf("Enter the type of shape (c for circle, r for rectangle): ");
    scanf("%c", &shape_type);

    if (shape_type == 'c') {
        printf("Enter the radius of the circle: ");
        scanf("%f", &s.radius);
        area = 3.14 * s.radius * s.radius;
        printf("The area of the circle is %.2f\n", area);
    } else if (shape_type == 'r') {
        printf("Enter the length and width of the rectangle: ");
        scanf("%f %f", &s.rect.length, &s.rect.width);
        area = s.rect.length * s.rect.width;
        printf("The area of the rectangle is %.2f\n", area);
    } else {
        printf("Invalid shape type entered.\n");
    }
```

```
C:\Users\LOKESH\AppData\Lc
Enter the type of shape (c for circle, r for rectangle): 5
Invalid shape type entered.

registrationnumber:192211541
--------------------------------
Process exited after 2.495 seconds with return value 0
Press any key to continue . . .
```

```c
#include <stdio.h>

union number {
  int i;
  float f;
};

int main() {
  union number data;
  char choice;

  printf("Enter a value: ");
  scanf(" %c", &choice);

  if (choice == 'i') {
    printf("Enter an integer value: ");
    scanf("%d", &data.i);
    printf("You entered: %d\n", data.i);
  }
  else if (choice == 'f') {
    printf("Enter a float value: ");
    scanf("%f", &data.f);
    printf("You entered: %f\n", data.f);
  }
  else {
    printf("Invalid choice!\n");
  }
  printf("\nregistration number:192211541");
}
```

```
public int __cdecl printf (const char * __restrict__ _Format, ...)
```



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

struct customer {
    int account_no;
    char name[50];
    float balance;
};

void print_low_balance_customers(struct customer bank_customers[], int
    printf("Customers with balance less than 100 Rs:\n");
    int i;
    for (i = 0; i < size; i++) {
        if (bank_customers[i].balance < 100) {
            printf("Account No: %d, Name: %s\n", bank_customers[i].acc
        }
    }
}

int main() {
    struct customer bank_customers[3];
    int i;

    for (i = 0; i < 3; i++) {
        printf("Enter details for customer %d:\n", i+1);
        printf("Account No: ");
public int __cdecl printf (const char * __restrict__ _Format, ...)
        printf("Name: ");
        scanf("%s", bank_customers[i].name);
        printf("Balance: ");
        scanf("%f", &bank_customers[i].balance);
    }
```

```
C:\Users\LOKESH\AppData\Lc
Enter details for customer 1:
Account No: 1234
Name: sai
Balance: 8000
Enter details for customer 2:
Account No: 4536
Name: raj
Balance: 4000
Enter details for customer 3:
Account No: 5034
Name: allu
Balance: 500
Customers with balance less than 100 Rs:
enter the rigister number 192211541
--------------------------------
Process exited after 62.29 seconds with return value 0
Press any key to continue . . .
```

[*] duplicate element .c | even or odd in array.c | Untitled7 | reversa array.c

```c
#include <stdio.h>
#define MAX_SIZE 100
int main()
{
    int arr[MAX_SIZE];
    int size, i, j, temp;
    printf("Enter size of the array: ");
    scanf("%d", &size);
    printf("Enter elements of the array:\n");
    for(i=0; i<size; i++)
    {
        scanf("%d", &arr[i]);
    }
    for(i=0; i<size; i++)
    {
        for(j=i+1; j<size; j++)
        {
            if(arr[i] < arr[j])
            {
                temp = arr[i];
                arr[i] = arr[j];
                arr[j] = temp;
            }
        }
    }
    printf("\nArray in descending order: ");
    for(i=0; i<size; i++)
    {
        printf("%d ", arr[i]);
    }
    printf("\nRegistration Number:192211541");
    r
}
```

```
public int __cdecl printf (const char * __restrict__ _Format, ...)
```

C:\Users\LOKESH\Documents'

```
Enter size of the array: 5
Enter elements of the array:
234
780
130
56
90

Array in descending order: 780 234 130 90 56
Registration Number:192211541
--------------------------------
Process exited after 17.87 seconds with return value
0
Press any key to continue . . .
```

```c
#include <stdio.h>

int main() {
    int size;
    printf("Enter the size of the array: ");
    scanf("%d", &size);

    int arr[size];
    printf("Enter %d elements in the array:\n", size);
    for (int i = 0; i < size; i++) {
        scanf("%d", &arr[i]);
    }

    printf("The original array is: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }

    int temp;
    for (int i = 0, j = size - 1; i < j; i++, j--) {
        temp = arr[i];
        arr[i] = arr[j];
        arr[j] = temp;
    }

    printf("\nThe reversed array is: ");
    for (int i = 0; i < size; i++) {
        printf("%d ", arr[i]);
    }
public int __cdecl printf (const char * __restrict__ _Format, ...)
{
    printf("\nenter the regester number 192211541");
```

```
C:\Users\LOKESH\Documents'
Enter the size of the array: 5
Enter 5 elements in the array:
7
8
9
4
6
The original array is: 7 8 9 4 6
The reversed array is: 6 4 9 8 7
enter the regester number 192211541
--------------------------------
Process exited after 6.322 seconds with return value
0
Press any key to continue . . .
```