**C PROGRAMMING**

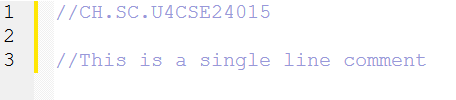
**PRACTICE PROGRAMS**

NAME: S DEEPAK BHARATHWAJ

ROLL NO: CH.SC.U4CSE24015

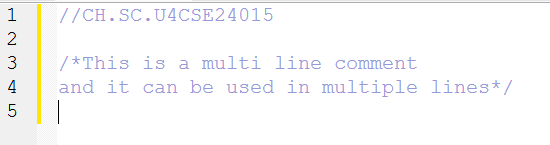
1. Single line comment

**CODE:**



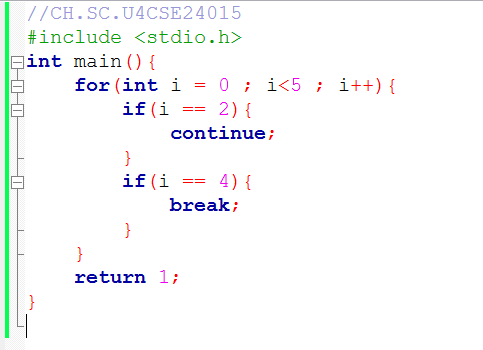
1. Multi line comment

**CODE:**

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1. Break and continue statements

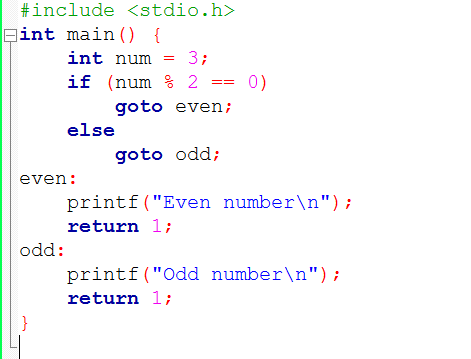
**CODE:**

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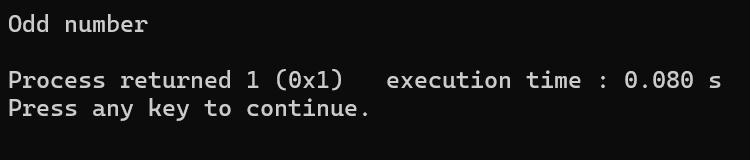
1. Goto – even and odd

**CODE:**

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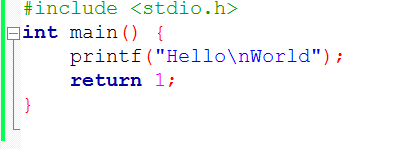
**OUTPUT:**

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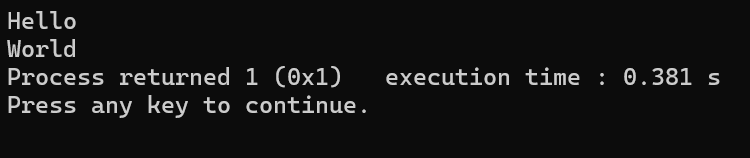
1. New line character

**CODE:**

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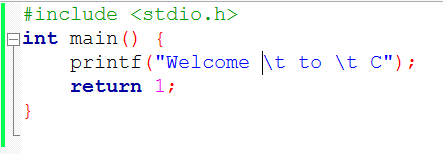
**OUTPUT:**

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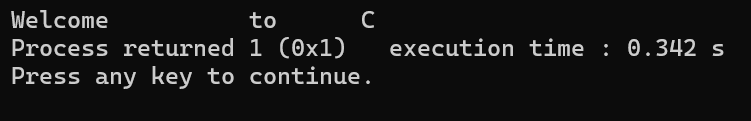
1. Tab line character

**CODE:**

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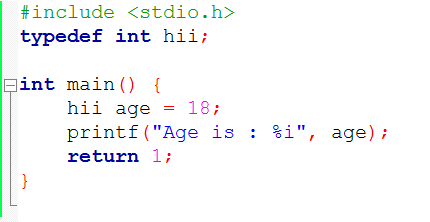
**OUTPUT:**

****

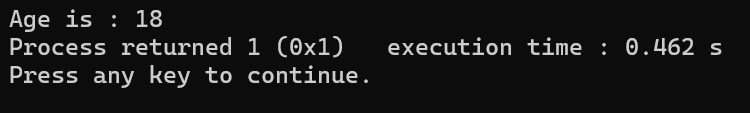
1. Typedef program

**CODE:**

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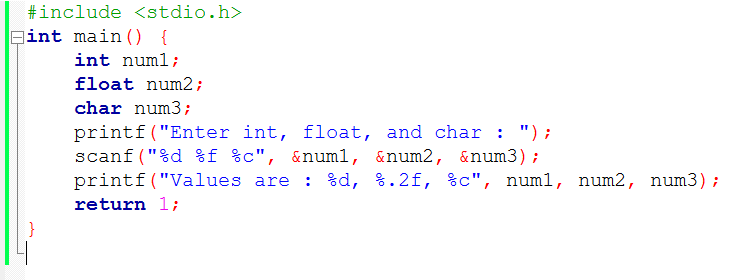
**OUTPUT:**

****

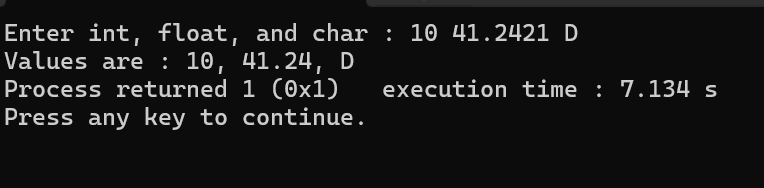
1. Input and display of datatypes

**CODE:**

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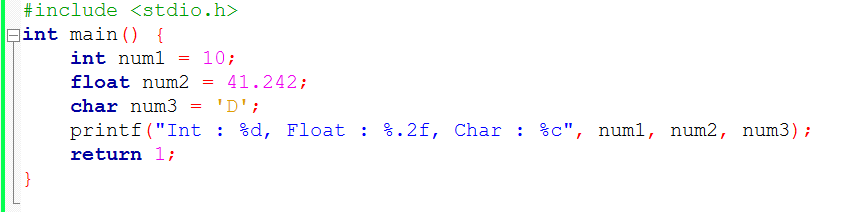
**OUTPUT:**

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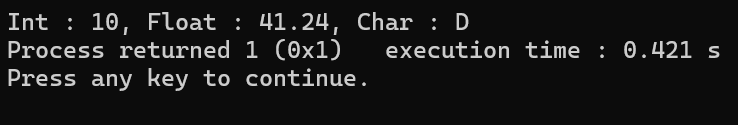
1. Display Without Input

**CODE:**

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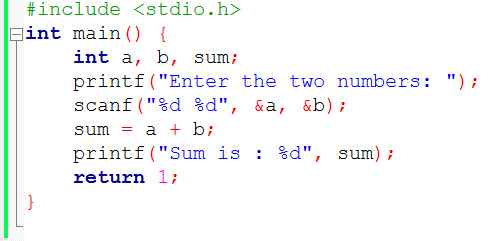
**OUTPUT:**

****

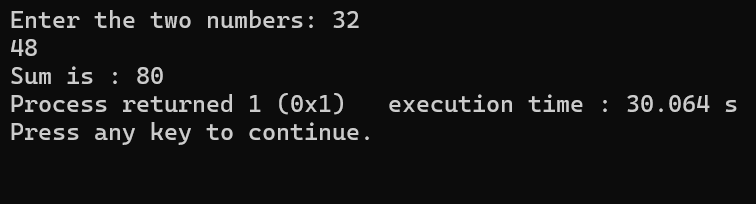
1. Sum of 2 Numbers with user input values

**CODE:**

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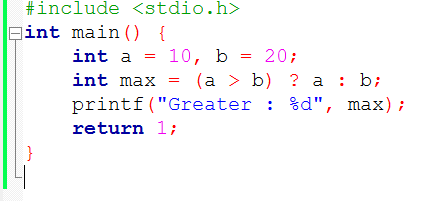
**OUTPUT:**

****

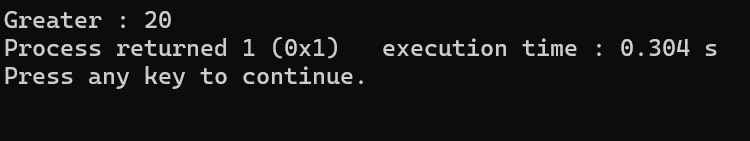
1. Usage of Ternary Operator

**CODE:**

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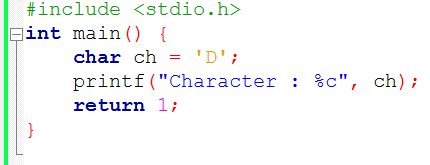
**OUTPUT:**

****

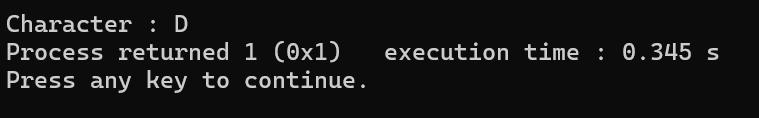
1. To display a character

**CODE:**

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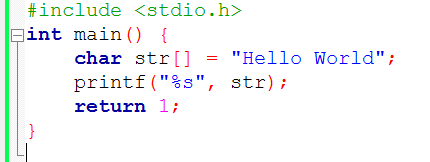
**OUTPUT:**

****

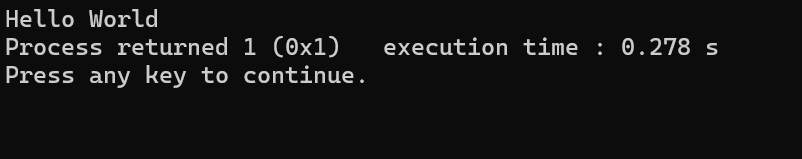
1. To display a string

**CODE:**

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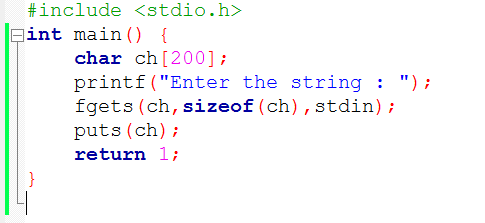
**OUTPUT:**

****

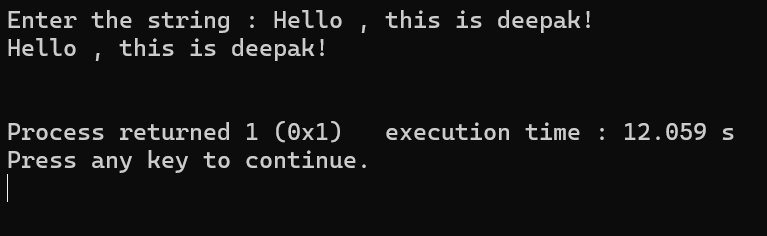
1. To display a Group of Strings

**CODE:**

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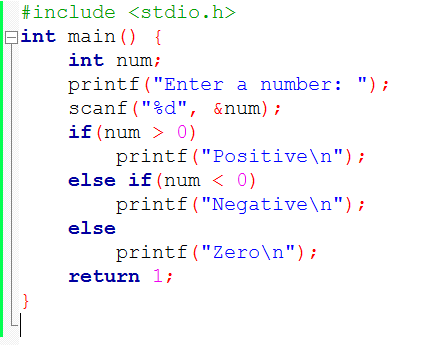
**OUTPUT:**

****

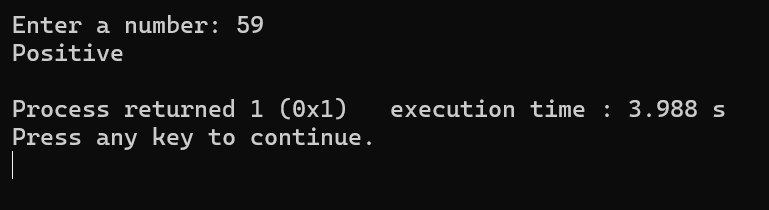
1. C program to check whether a number is positive or negative

**CODE:**

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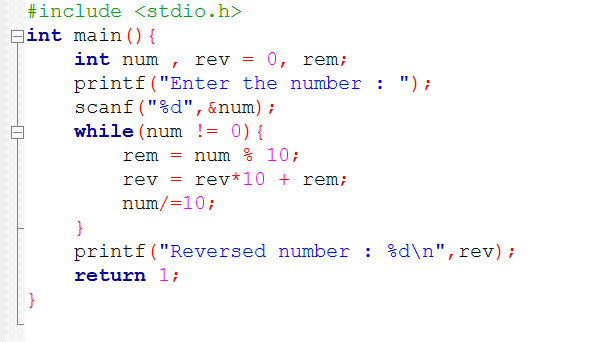
**OUTPUT:**

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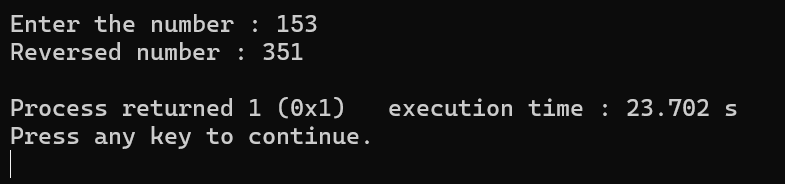
16. Reverse an input number using recursion

**CODE:**

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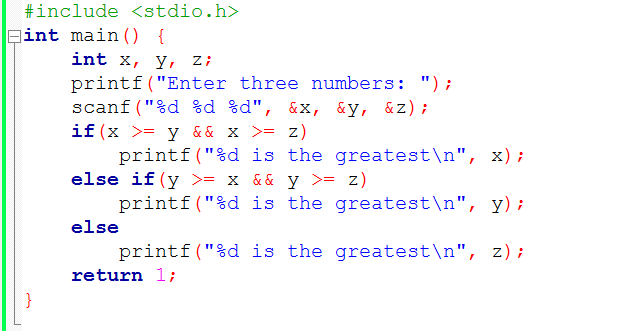
**OUTPUT:**

****

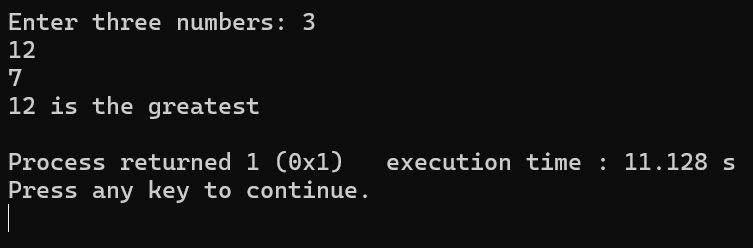
1. Program to find greatest of three numbers

**CODE:**

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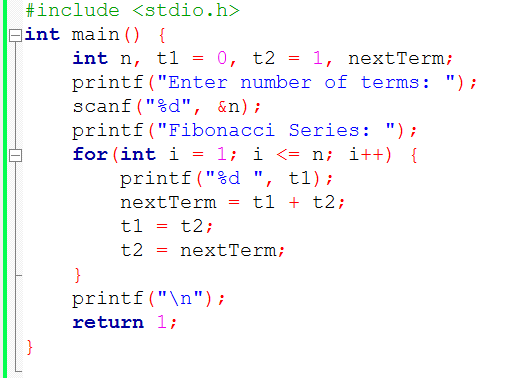
**OUTPUT:**

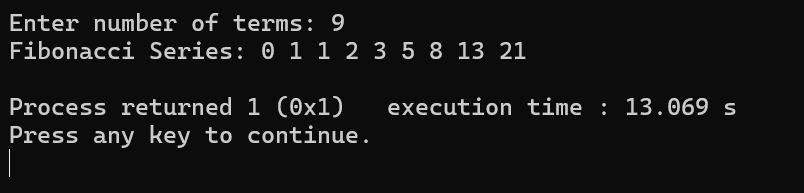
****

1. C Program to print Fibonacci series in a given range

**CODE:**

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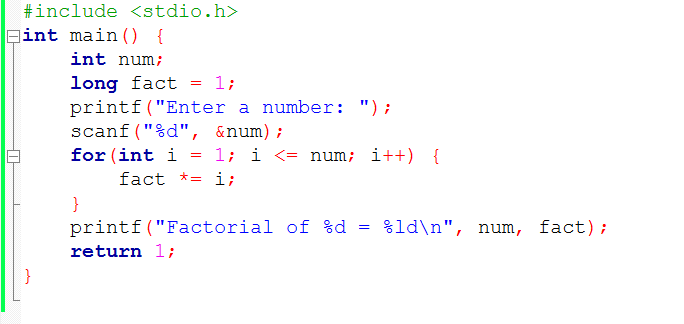
****

**OUTPUT:  
**

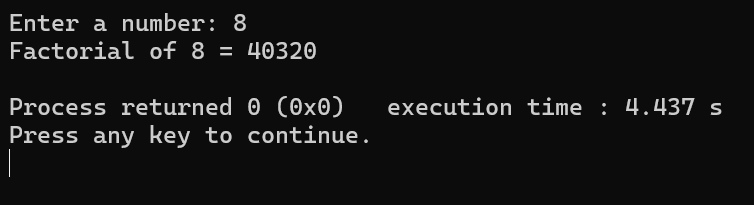
1. C Program to find factorial of a given number

**CODE:**

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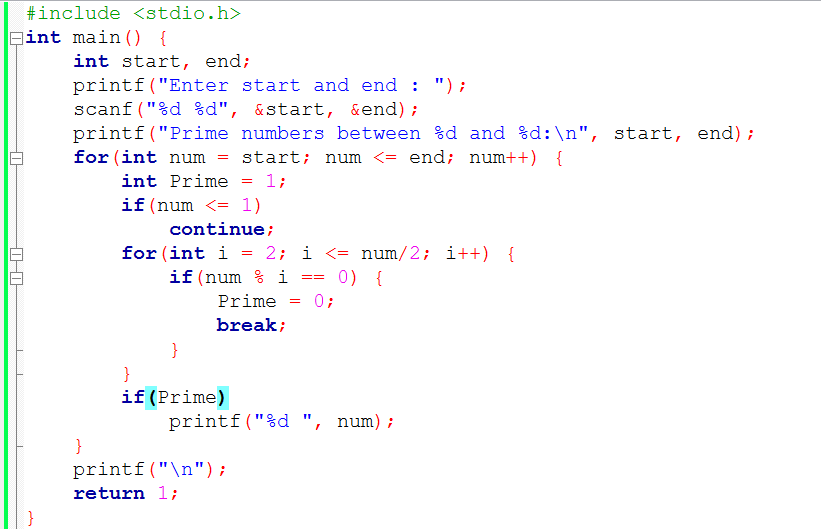
**OUTPUT:**

****

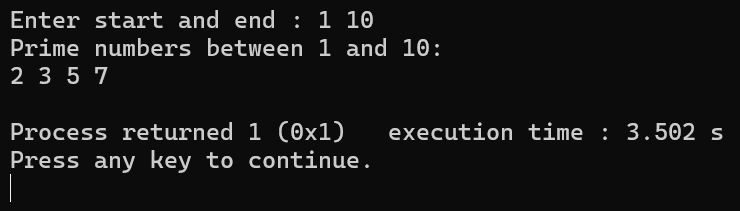
1. Find Prime numbers in a given range

**CODE:**

****

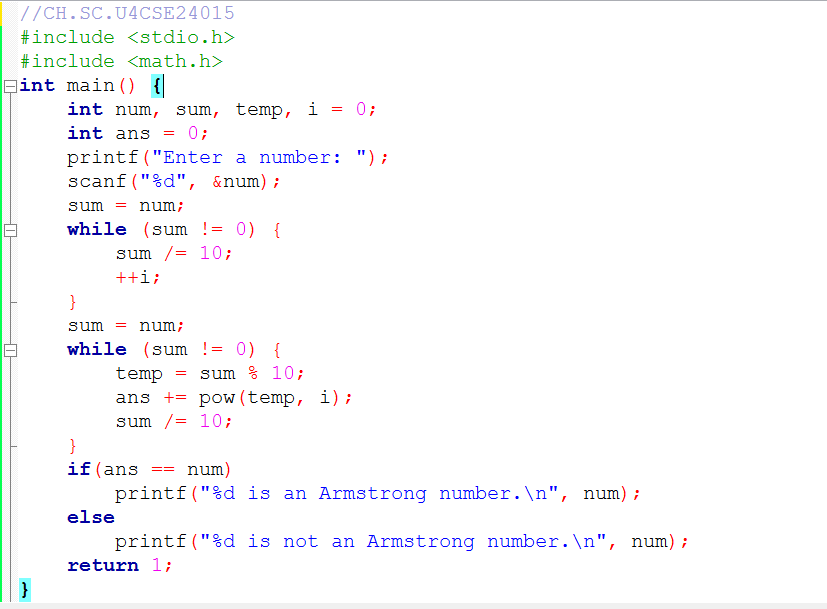
****

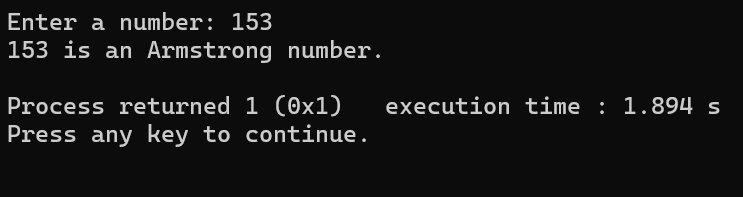
**OUTPUT:**

****

1. C Program to check if given number is Armstrong or not

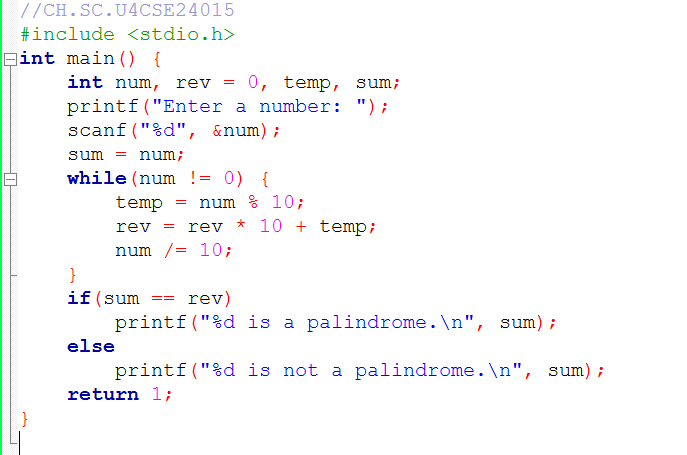
**CODE:**

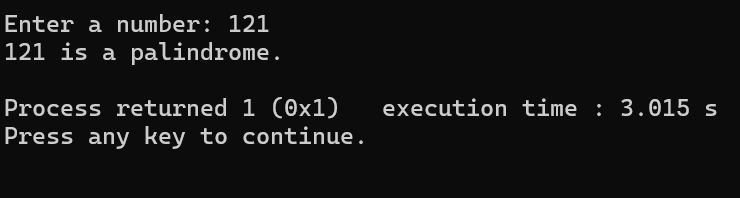
****

**OUTPUT:  
**

1. C Program to check if given number is palindrome or not

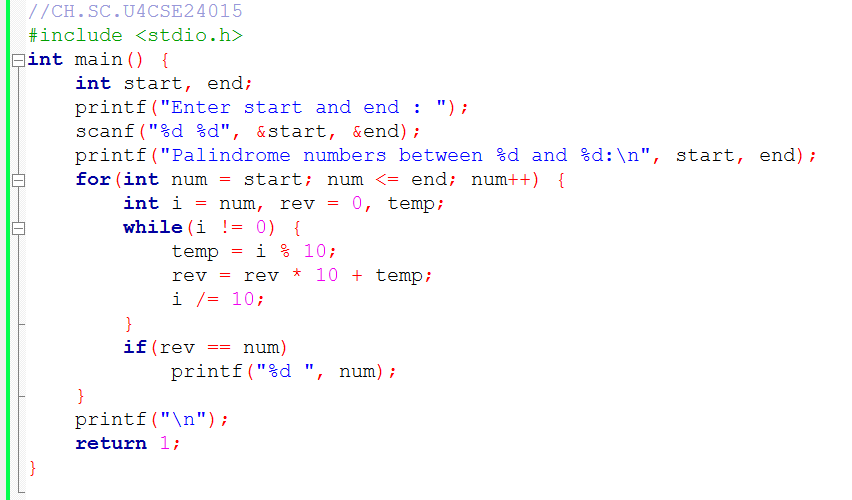
**CODE:**

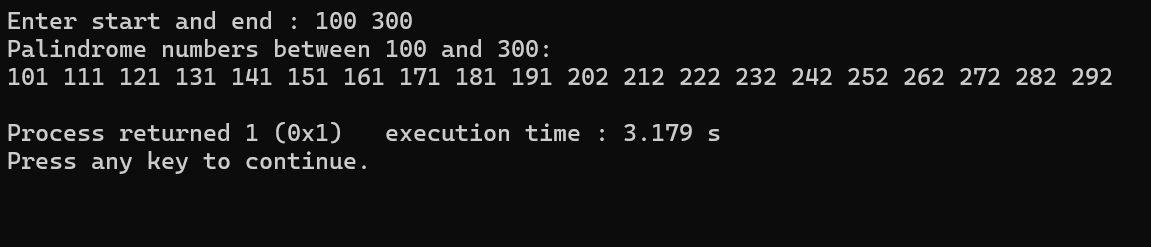
****

**OUTPUT:  
**

1. C Program to display palindrome numbers in a given range

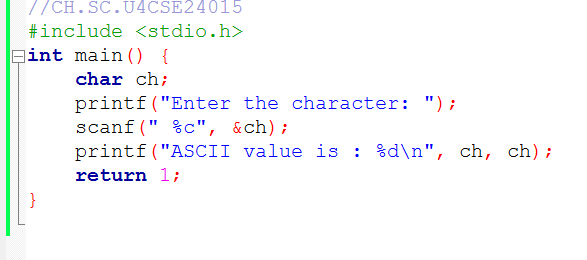
**CODE:**

****

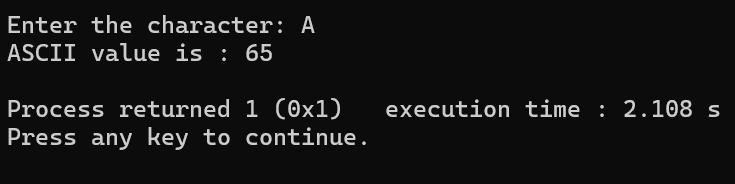
**OUTPUT:  
**

1. C Program to find out the ASCII value of a character

**CODE:**

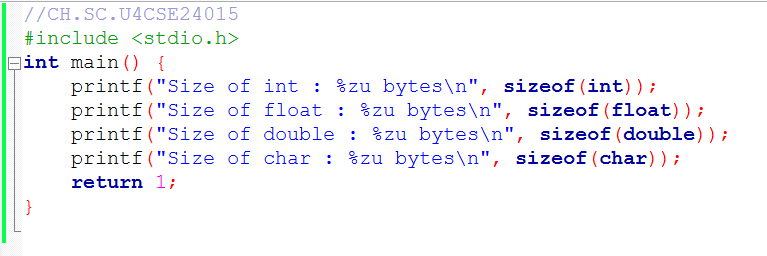
****

**OUTPUT:**

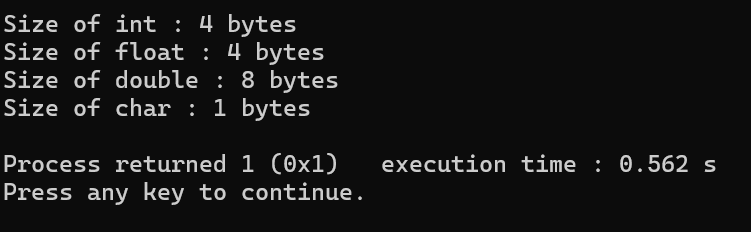
****

1. C Program to find the size of int, float, double and char

**CODE:**

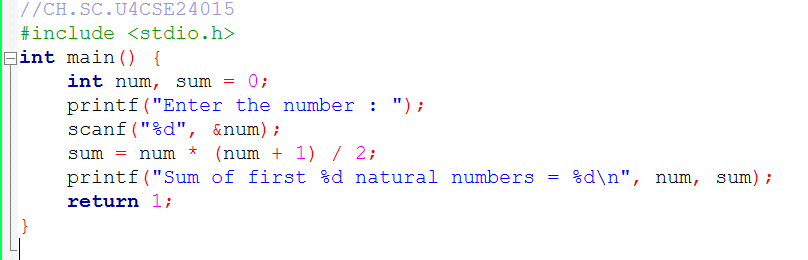
****

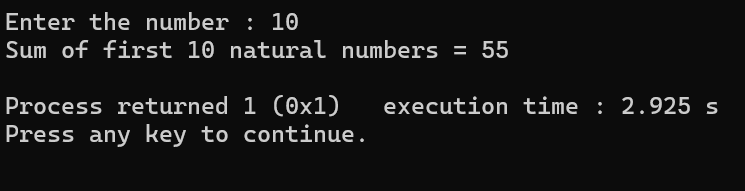
**OUTPUT:**

****

1. C Program to find sum of first n natural numbers

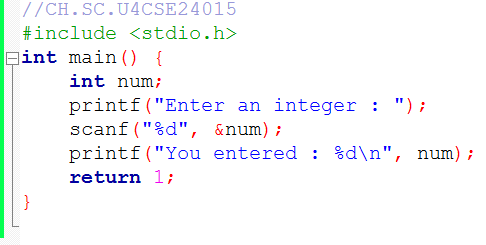
**CODE:**

****

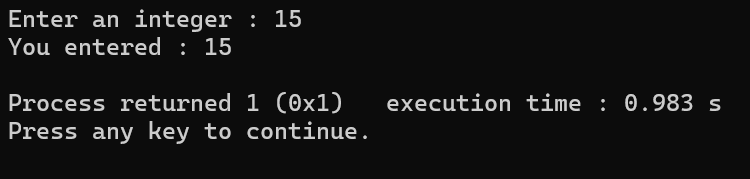
**OUTPUT:  
**

1. C Program to print integer entered by user

**CODE:**

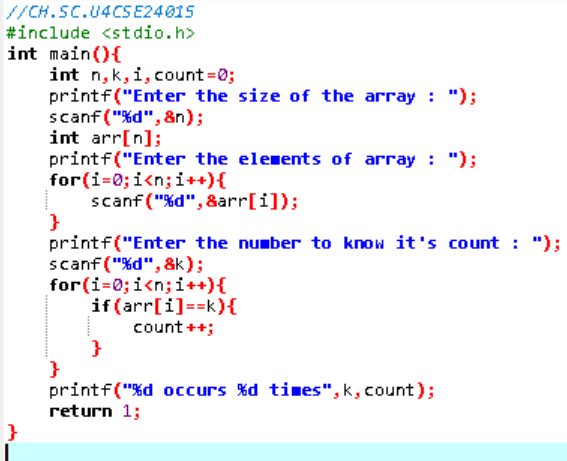
****

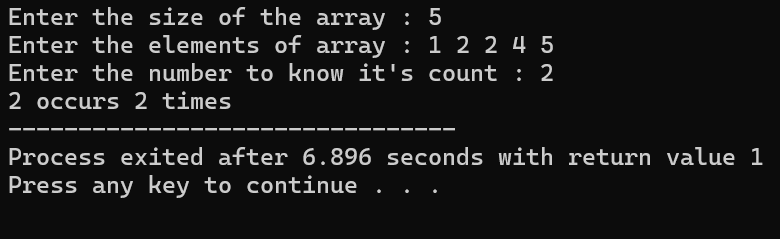
**OUTPUT:**

****

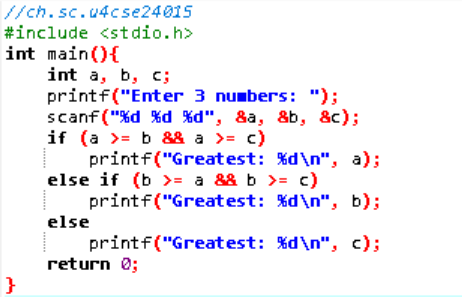
1. Occurrence of element in an array

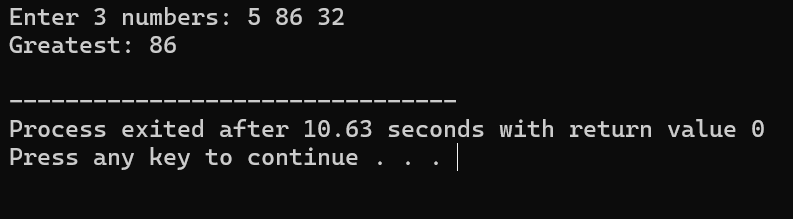
**CODE:**

****

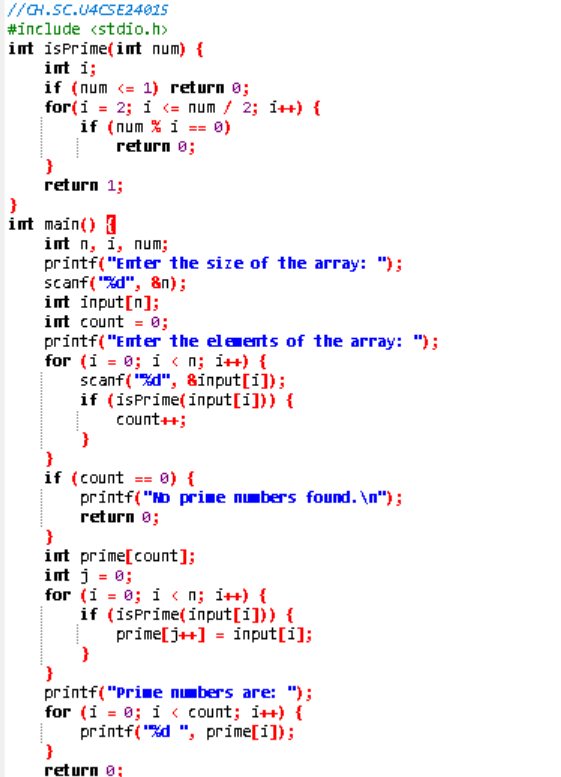
**OUTPUT:**

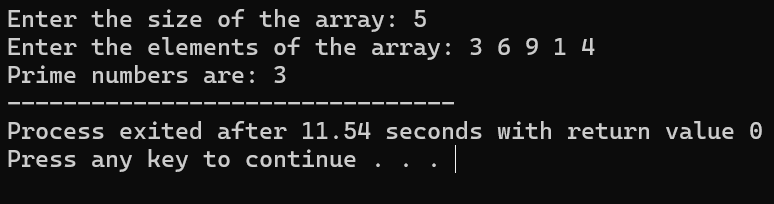
29.Greatest of 3 numbers

**CODE:**

**OUTPUT:**

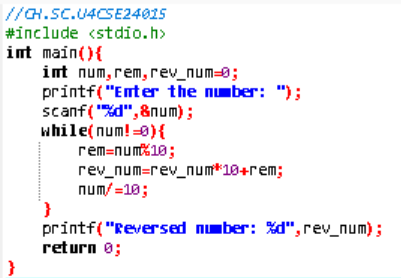
30.Prime numbers in an array

**CODE:**

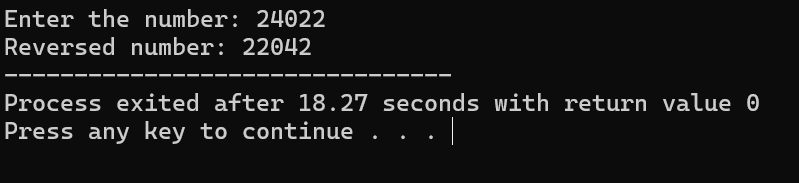
**OUTPUT:**

**31.Reverse of a number**

**CODE:**

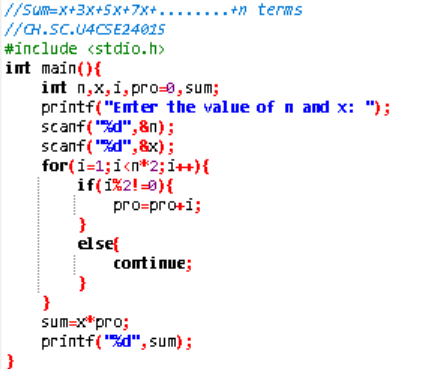
****

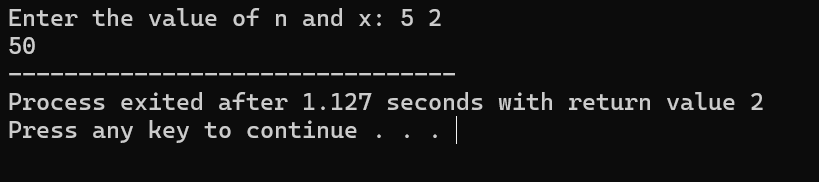
**OUTPUT:**

****

32.Sum of the terms x+3x+5x+…

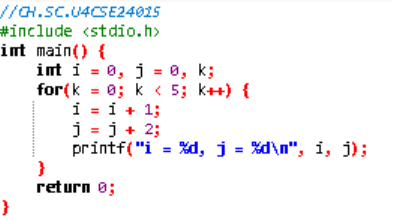
**CODE:**

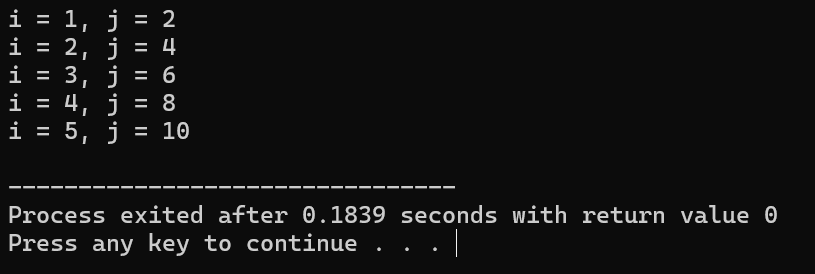


**OUTPUT:**

33. C program to update two variables i,j using for loop for 5 times with i=i+1,j=j+2.

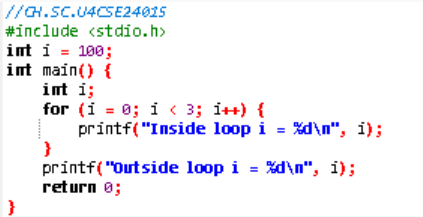
**CODE:**

****

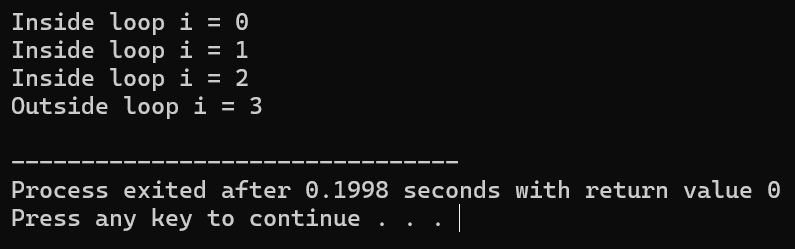
**OUTPUT:**

34. C program to demonstrate that a variable declared locally within a for loop does not affect a globally declared variable of the same name.

**CODE:**

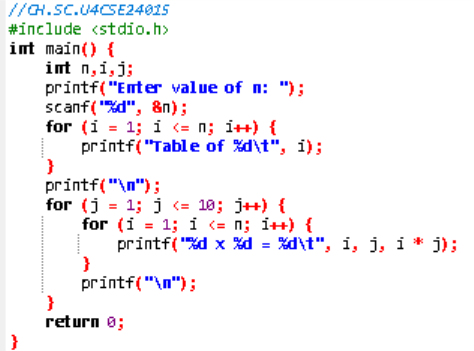
****

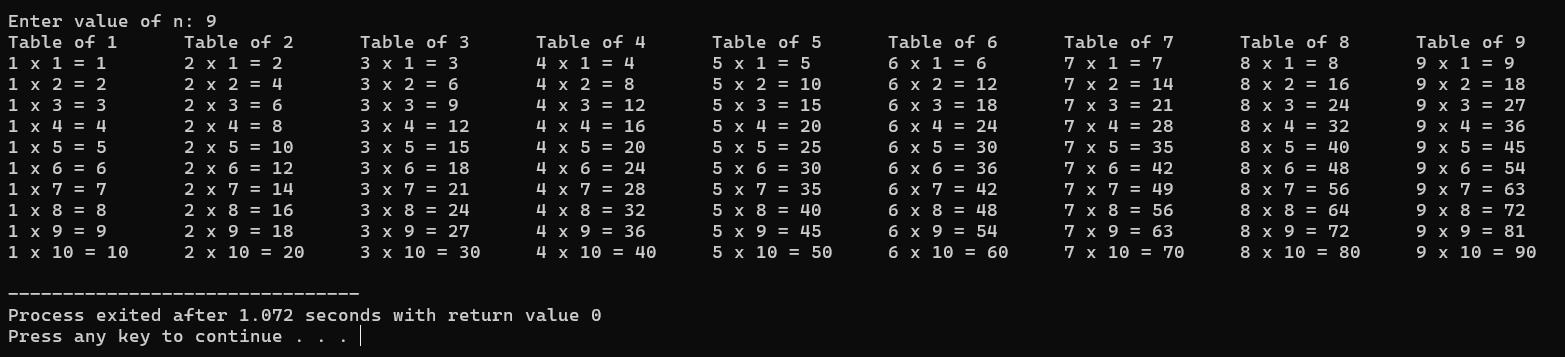
**OUTPUT:**

****

35. Write a C program to print the multiplication tables from 1 to n, each up to 10, based on user input.

**CODE:**

****

**OUTPUT:**

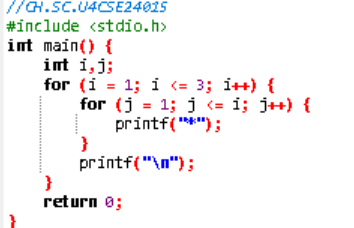
36. Pattern Printing:

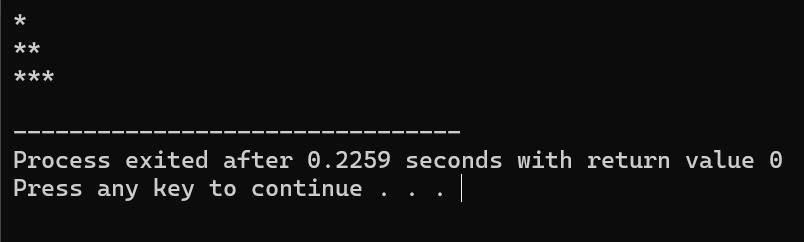
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**CODE:**

****

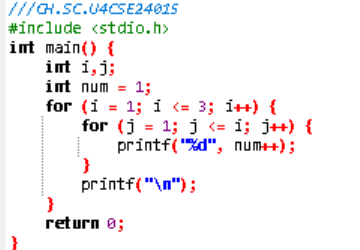
**OUTPUT:**

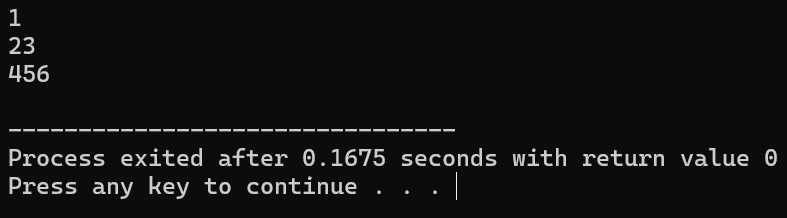
37. Pattern Printing:

1

23

456

**CODE:**

**OUTPUT:**

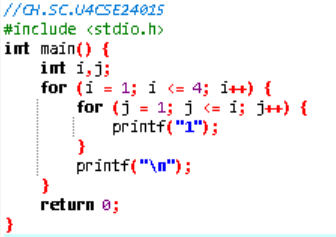
38. Pattern Printing:

1

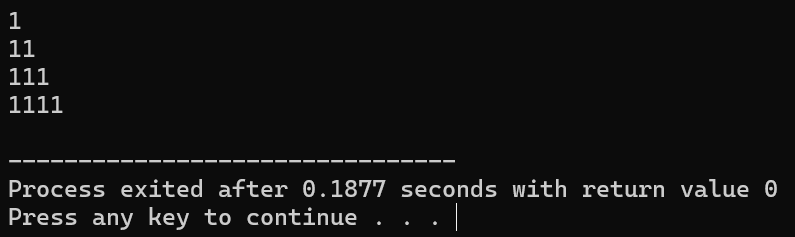
11

111

1111

**CODE:**

**OUTPUT:**

****

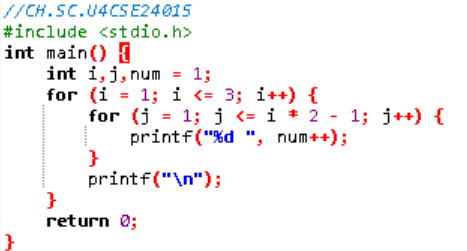
39. Pattern Printing:

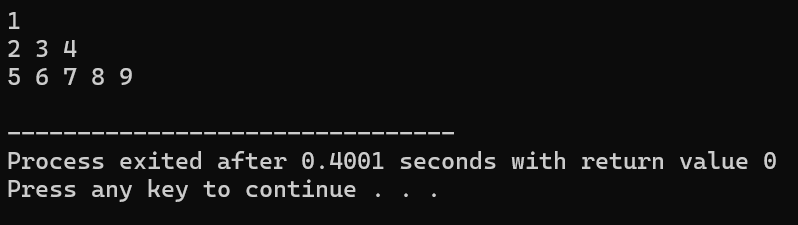
1

2 3

4 5 6 7

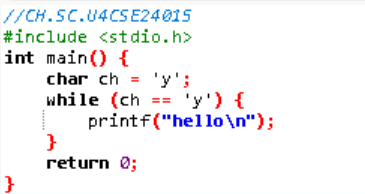
**CODE:**



**OUTPUT:**

40. C program that prints "hello" repeatedly in an infinite loop only when the character variable ch is set to 'y'. Initialize ch with any value. You may use a while loop to implement the logic.

**CODE:**

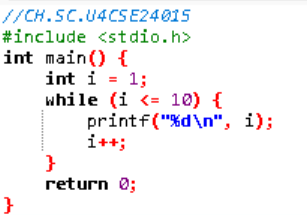
****

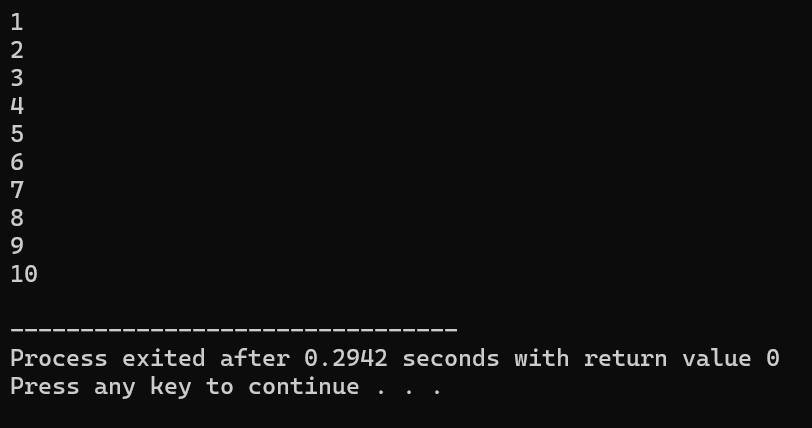
**OUTPUT:**

****

41. C program to print the numbers from 1 to 10 using a while loop.

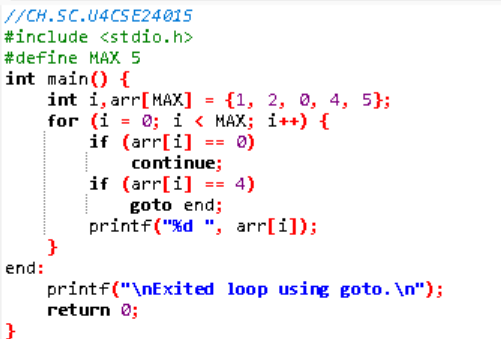
**CODE:**

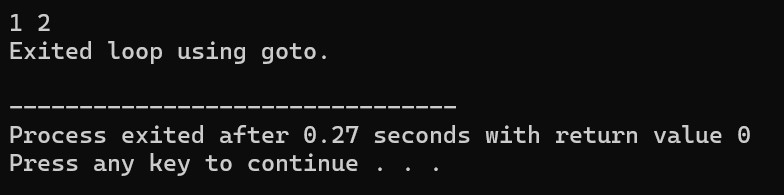
****

**OUTPUT:**

42. Use #define MAX in array program using break continue and goto also.

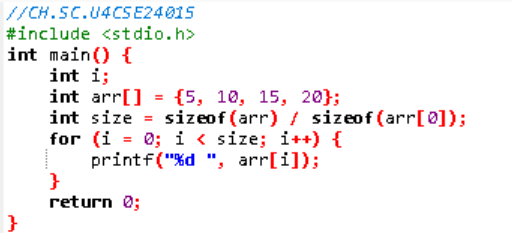
**CODE:**

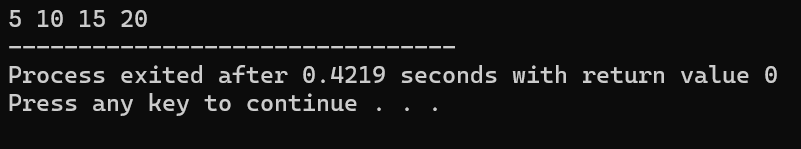
****

**OUTPUT:**

43. Pre-define an Array and print it

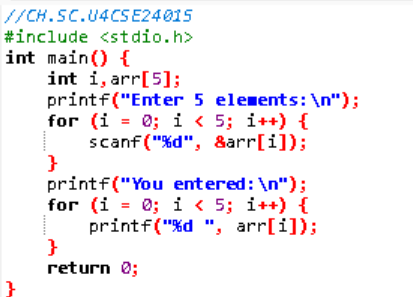
**CODE:**



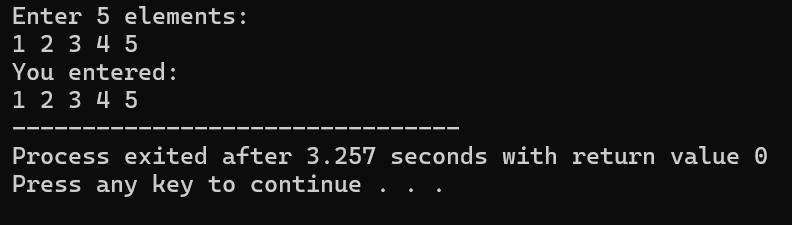
**OUTPUT:**

44. Get input of array from user and print it

**CODE:**

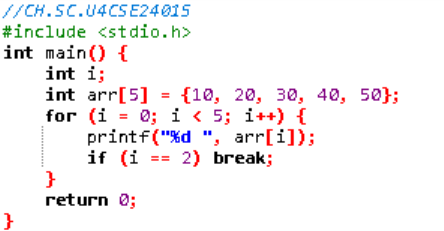


**OUTPUT:**

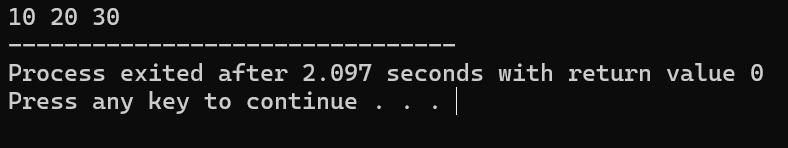
****

45. Print only three element of array and then break the loop

**CODE:**

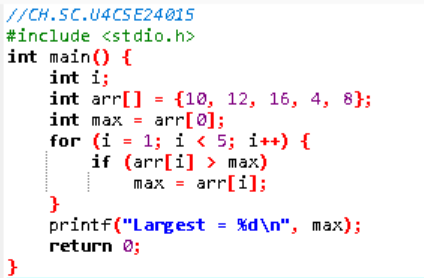


**OUTPUT:**

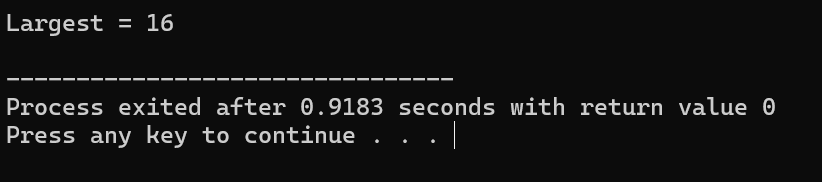
****

46. C program to find the largest number in array:{10,12,16,4,8}

**CODE:**

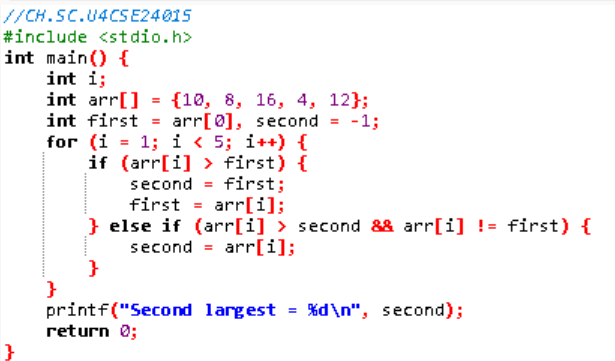


**OUTPUT:**

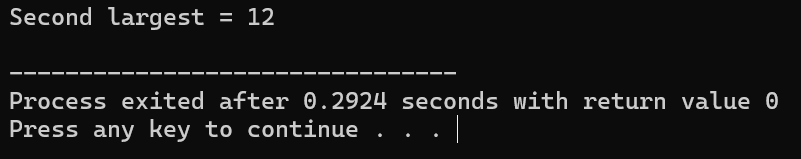
****

47. C Program to find the second largest element in array:{10,8,16,4,12}

**CODE:**

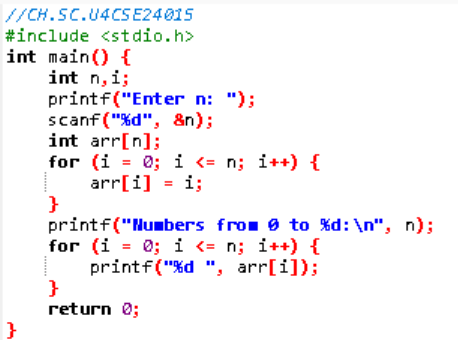


**OUTPUT:**

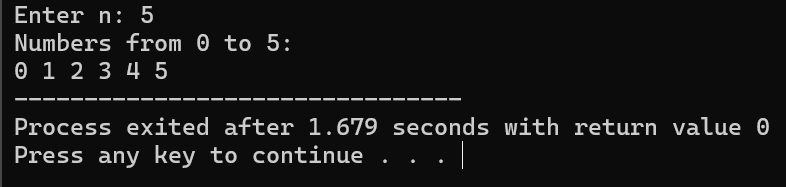
****

48. C program to print the numbers from 0 to n using array.

**CODE:**

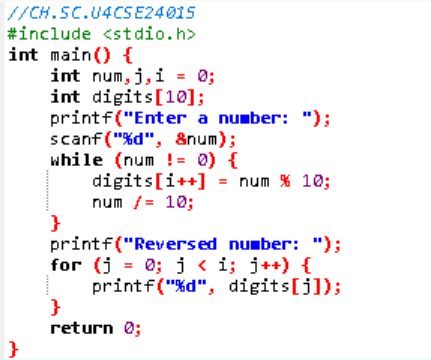


**OUTPUT:**

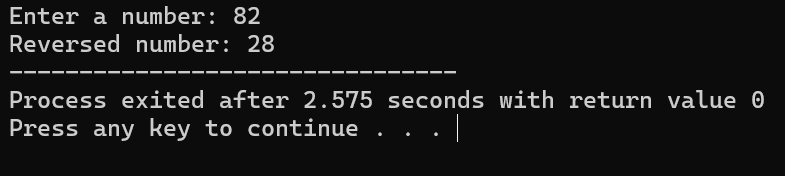
****

49. C program to reverse a number using array

**CODE:**



**OUTPUT:**

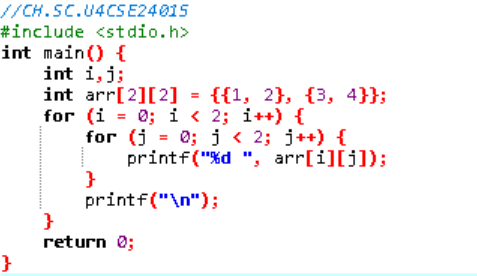
****

50. C program to create a 2-dimensional array and it should print output:

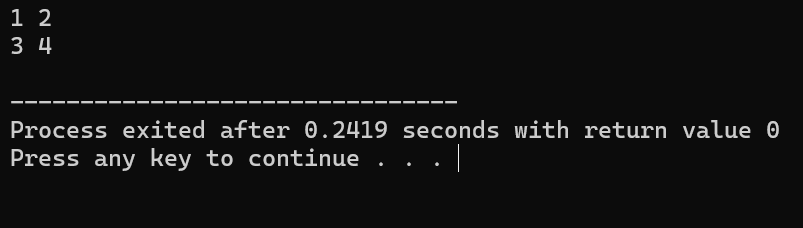
1 2

3 4

**CODE:**



**OUTPUT:**

****

51. Program for printing the sum of column and sum of rows for the array:

\_\_\_\_\_\_\_\_\_\_

|8 3 9 0 10|

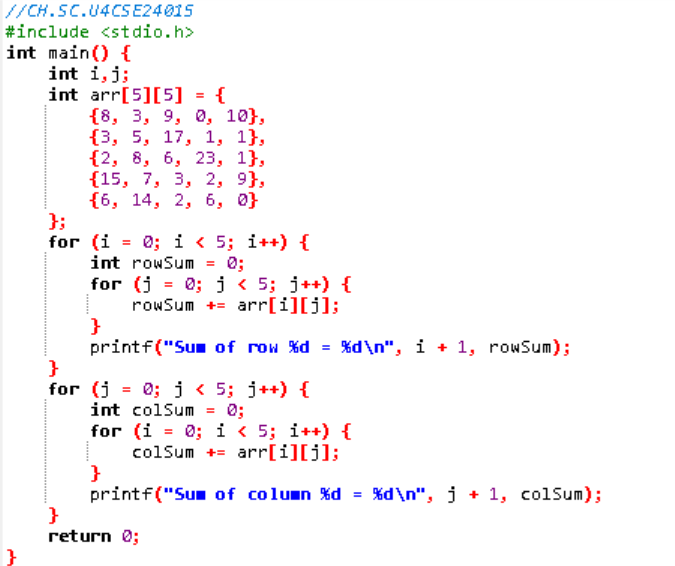
|3 5 17 1 1|

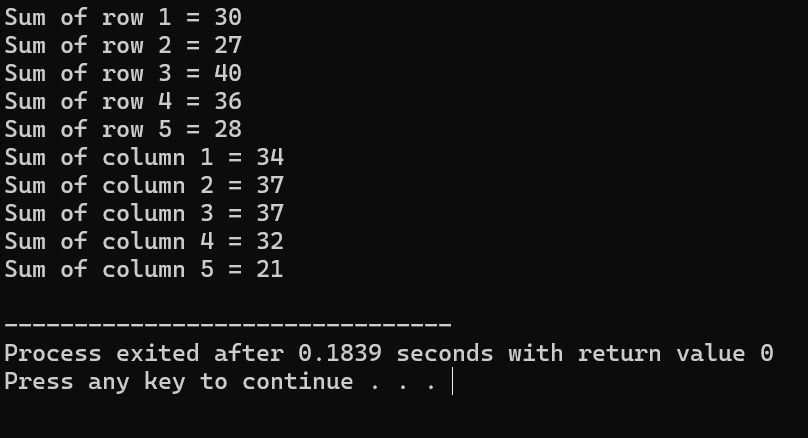
|2 8 6 23 1|

|15 7 3 2 9|

|6 14 2 6 0|

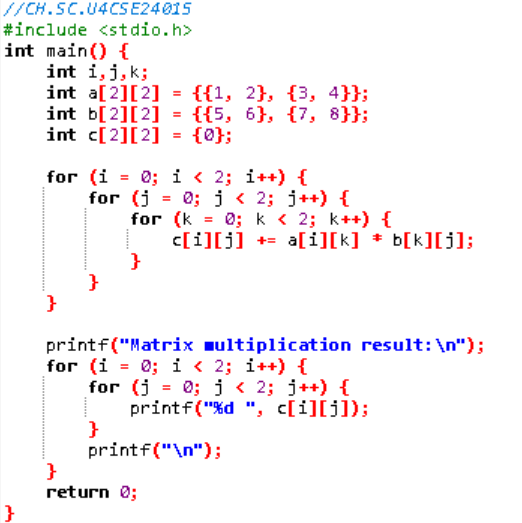
**CODE:**



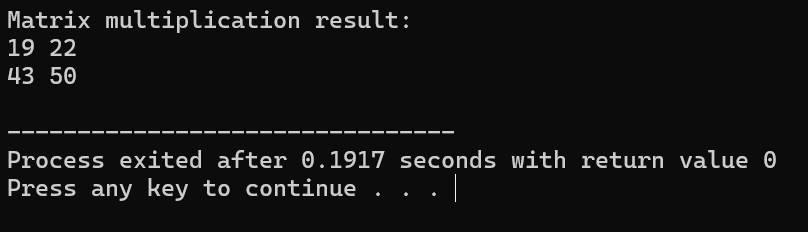
**OUTPUT:**

52. C Program to perform matrix multiplication

**CODE:**

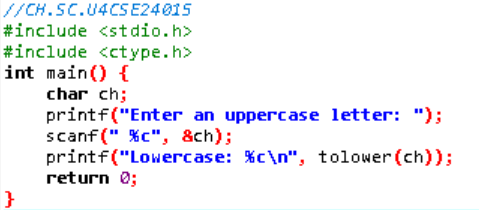
****

**OUTPUT:**

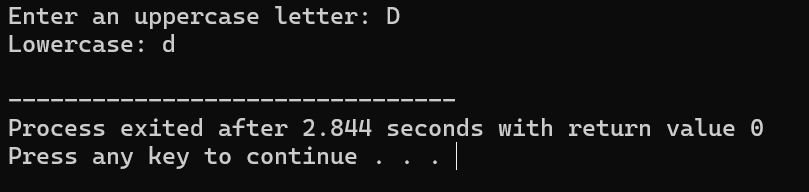
****

53. C Program to convert upper case to lower case

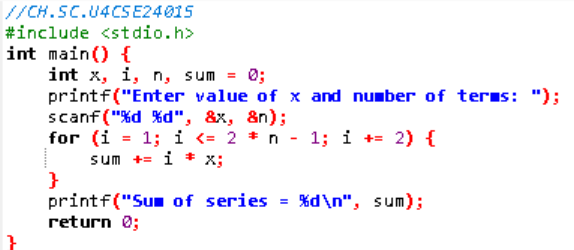
**CODE:**



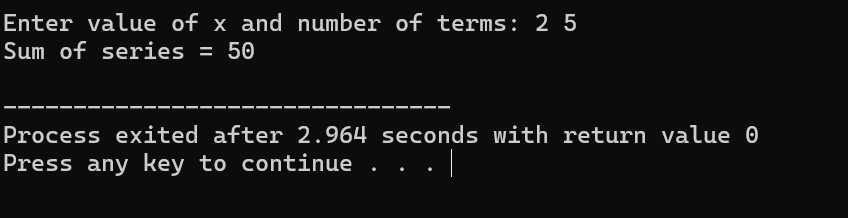
**OUTPUT:**

****

54. C Program to calculate the sum of first n terms of the series: x+3x+5x+....n(Hint:x(1+3+5+...n odd number))

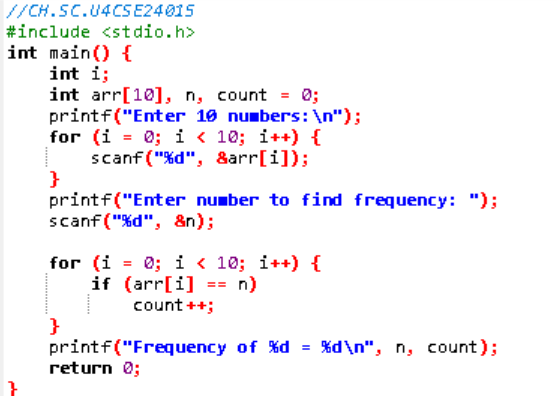
**CODE:**

**OUTPUT:**

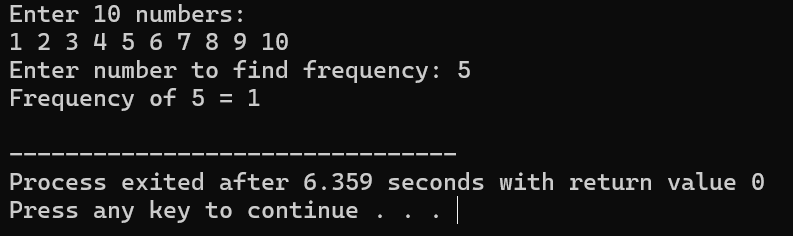
****

55. C Program to check frequency of a given number in an array.

**CODE:**

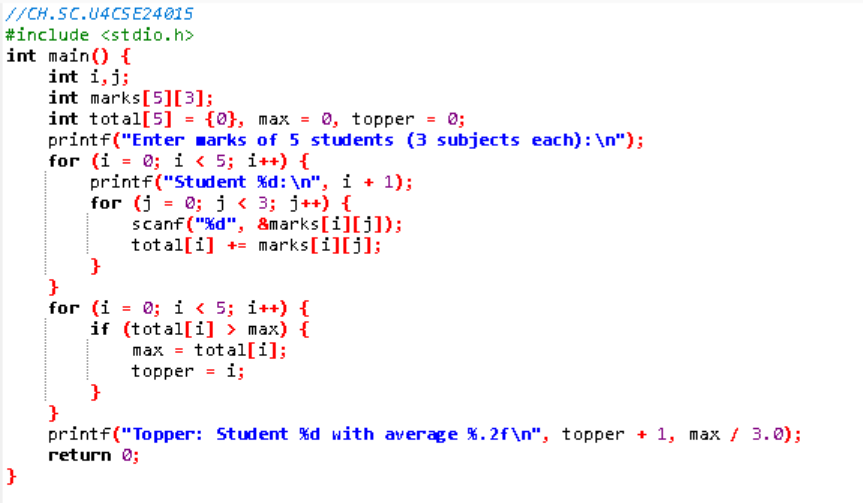


**OUTPUT:**

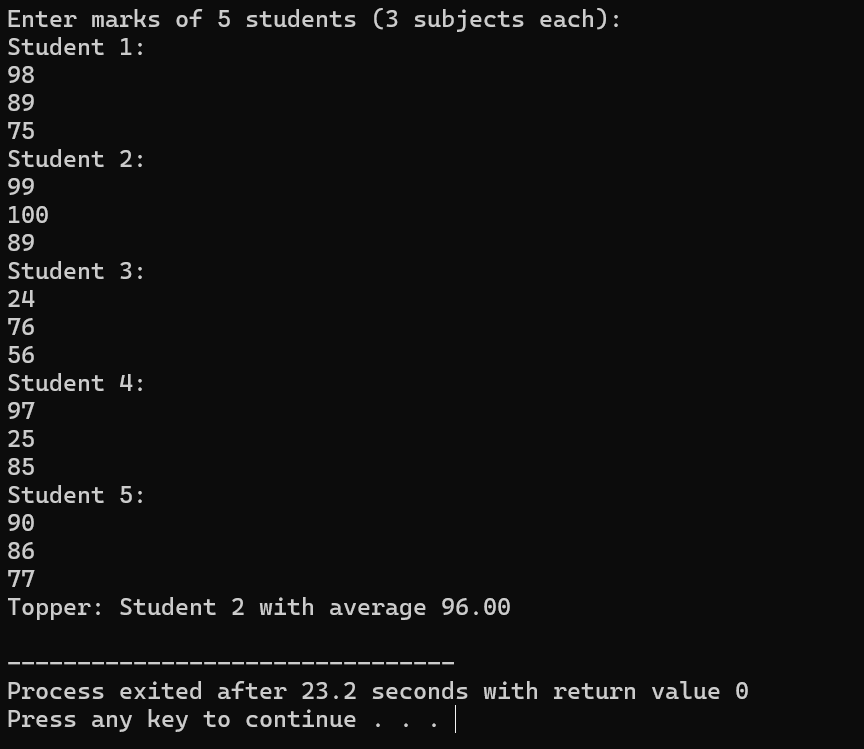
****

56. Write a program to get an multi-dimensional array from user for 5 students with 3 subject for each of them and print the topper and his avg mark

**CODE:**

****

**OUTPUT:**

****

57. A multiplex wants to record ratings given by 4 viewers for 3 movies.

•Use a 2D array to store ratings (out of 10).

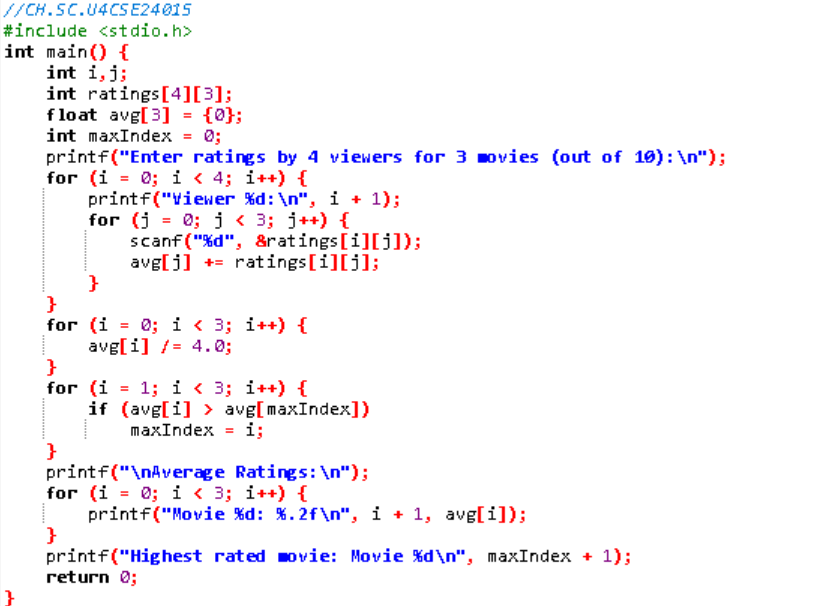
•Use a 1D array to store the average rating of each movie.

•Display:

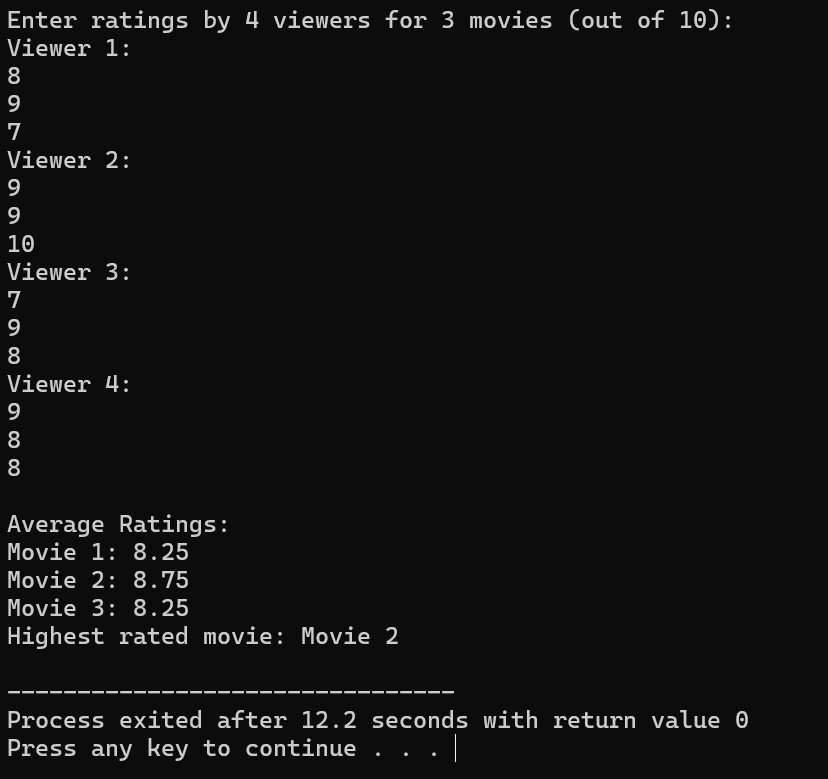
•Ratings given by each viewer

•Average rating of each movie

•Movie with the highest average rating.

**CODE:**

**OUTPUT:**

****

58. Cricket Team Scorecard

A cricket team played 5 matches. For each match, it has 11 players’ scores.

•Use a 2D array to store scores.

•Use a 1D array to store the total score of each match.

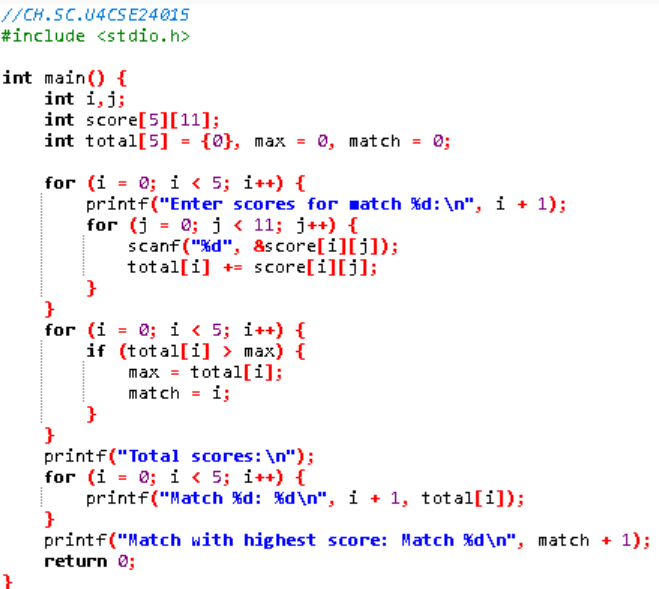
•Display:

•All scores of players match-wise

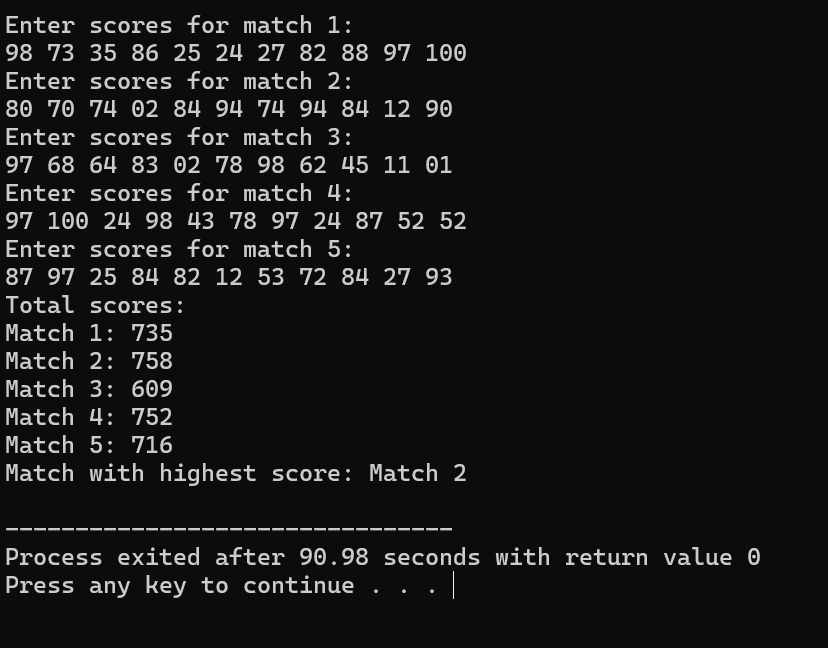
•Total score for each match

•Match with the highest total score.

**CODE:**



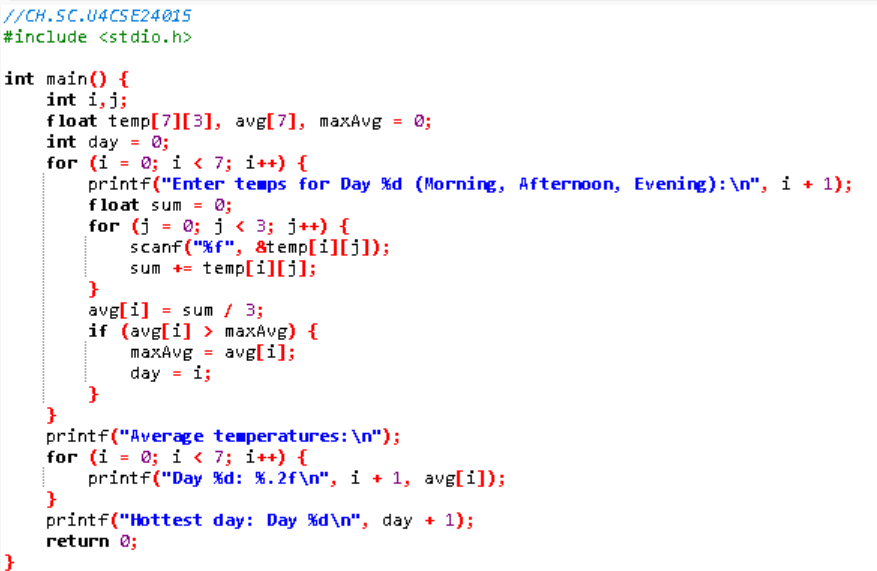
**OUTPUT:**



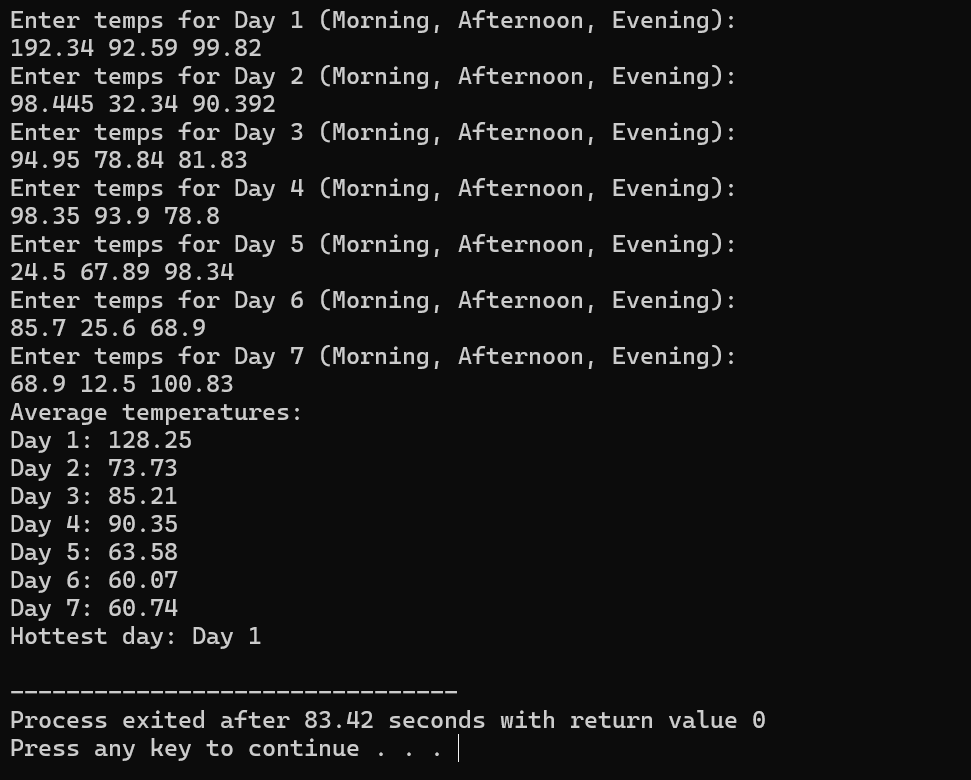
59.

|  |
| --- |
| Record daily temperature of 7 days at 2 different times( Morning , Afternoon and Evening)  - Use a 2D array to store temperatures recorded per day at different times.  - Use a 1D array to store the average temperature for each day.  - Display:  - All temperature values recorded day-wise.  - Average temperature for each day.  - The day with the highest average temperature. |

**CODE:**



**OUTPUT:**



60. A library has 5 shelves, and each shelf contains 4 different books.

- Use a 2D array to store the number of copies of each book on every shelf.

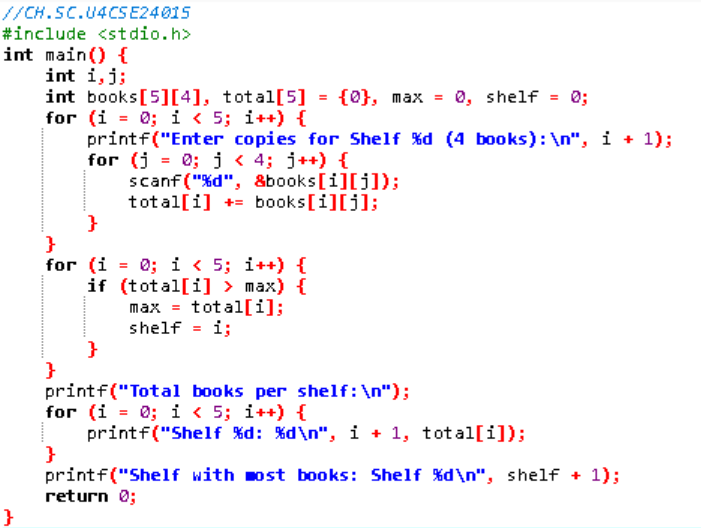
- Use a 1D array to store the total number of books on each shelf.

- Display:

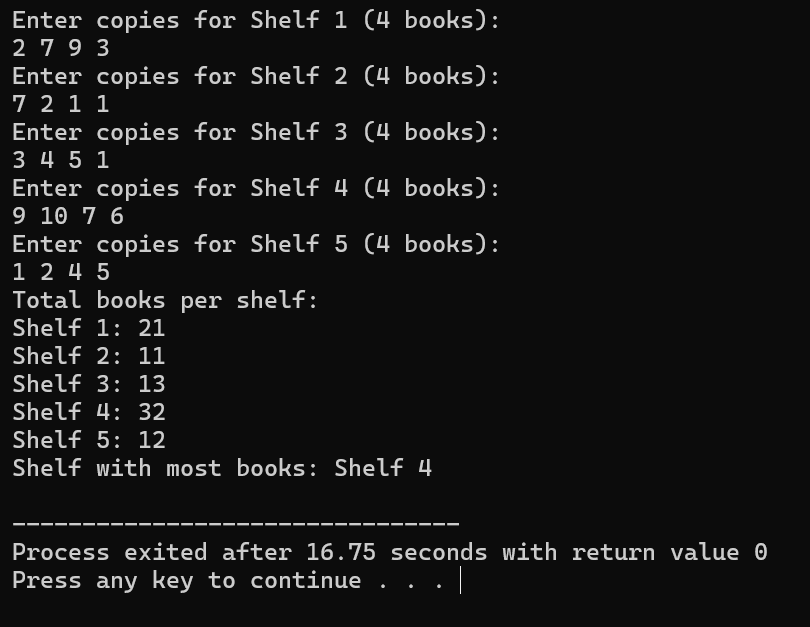
- Copies of books shelf-wise.

- Total books on each shelf.

- Shelf with the maximum number of books.

**CODE:  
**

**OUTPUT:**



61. In a sports event, 6 players participate in 4 games.

Write a C program to:

- Use a 2D array to store scores of each player for each game.

- Use a 1D array to store the total score of each player.

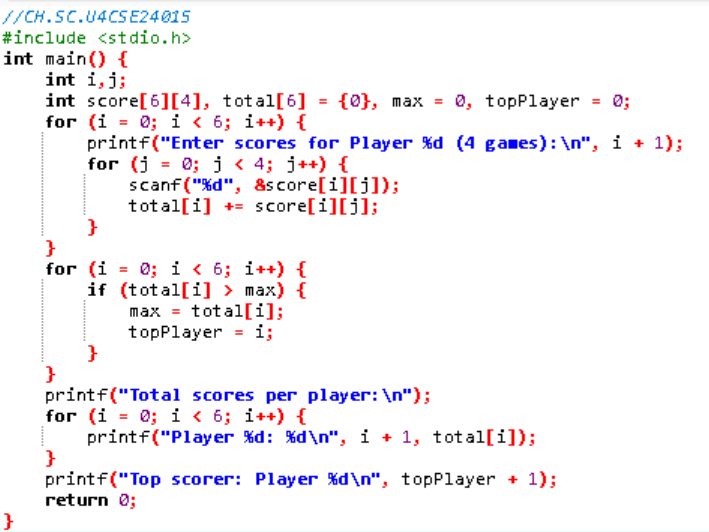
- Display:

- Player-wise scores

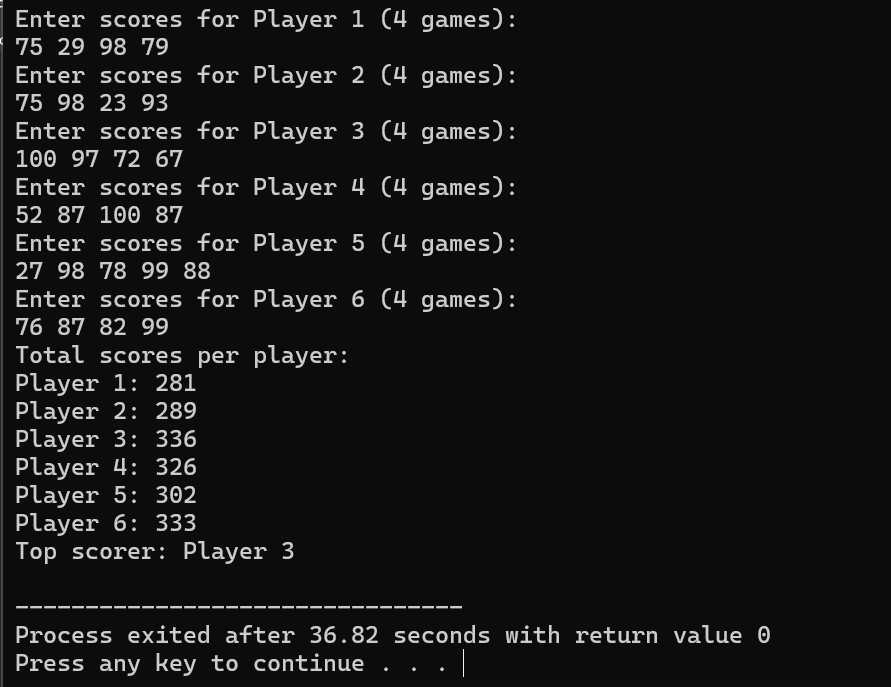
- Total score of each player

- Player with the highest total score

**CODE:**



**OUTPUT:**

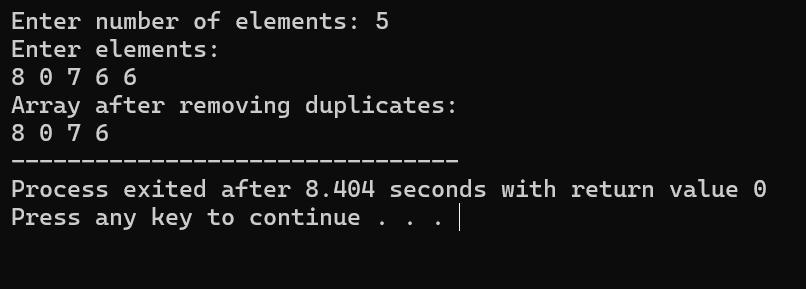


62. C - program which gets an array as an input and remove the duplicate elements from the array and print the new array.

**CODE:**

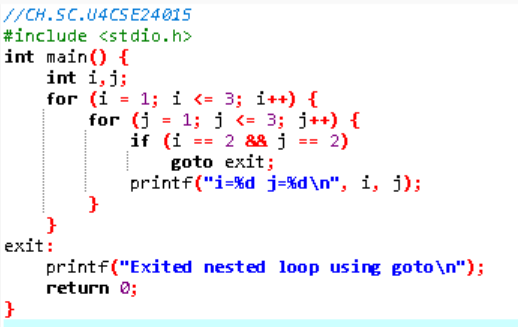


**OUTPUT:**

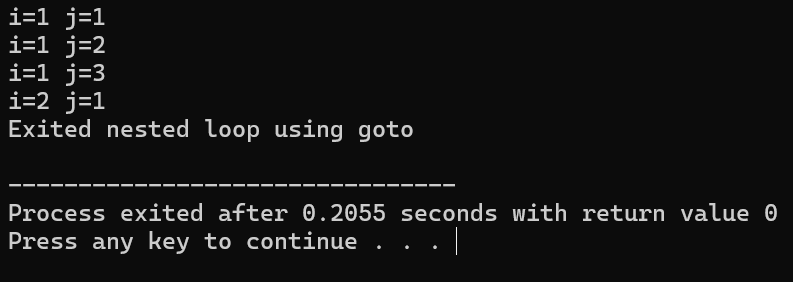
****

63. Program for Jumping out of nested loop using goto

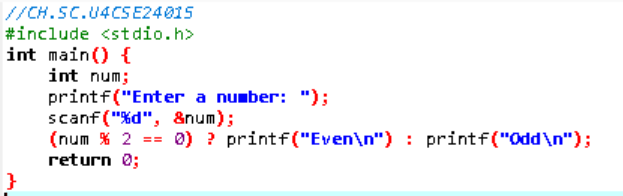
**CODE:**



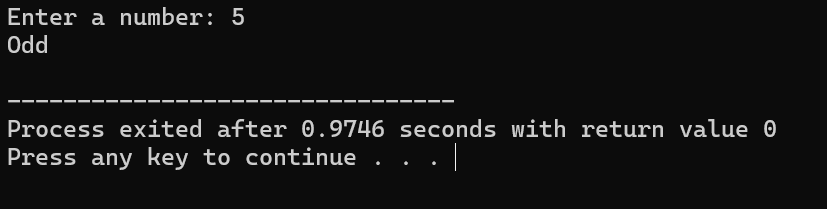
**OUTPUT:**

****

64. Check odd/even using ternary

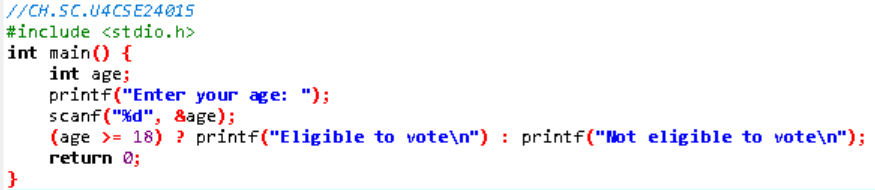
**CODE:**

**OUTPUT:**

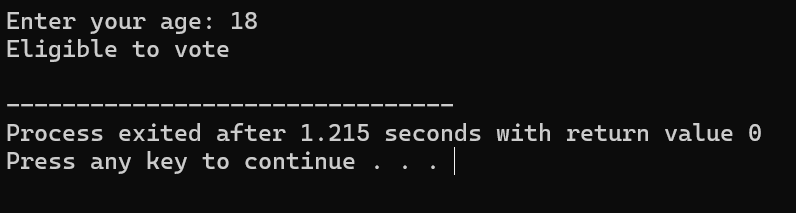
****

65. Eligibility to vote using ternary

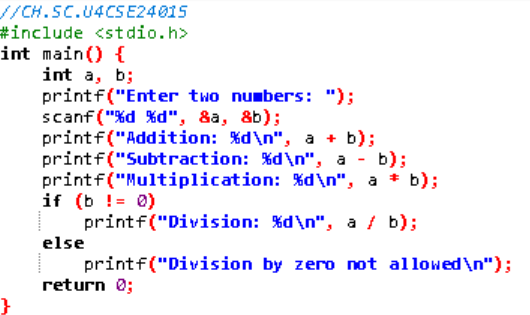
**CODE:**



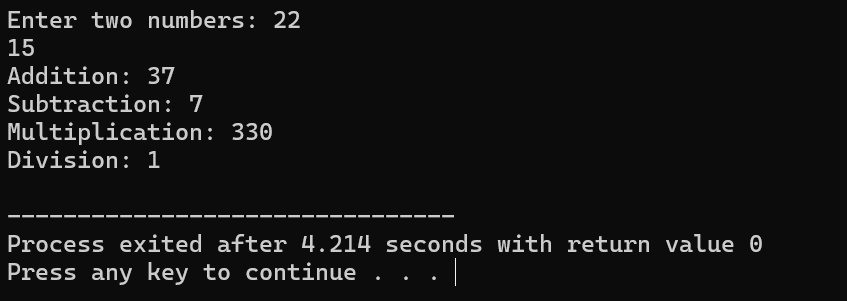
**OUTPUT:**



66. Arithmetic operations

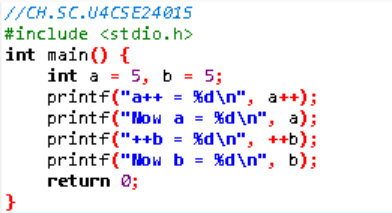
**CODE:**

**OUTPUT:**

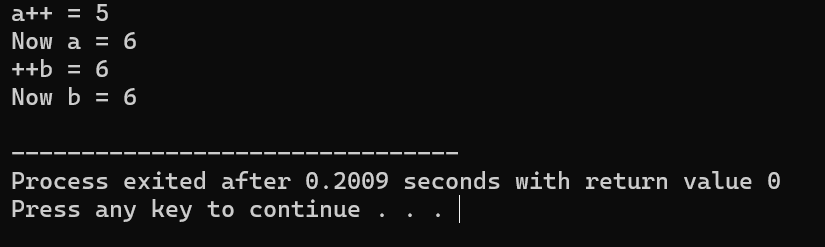
****

67. Pre and post increment in all ways

**CODE:**

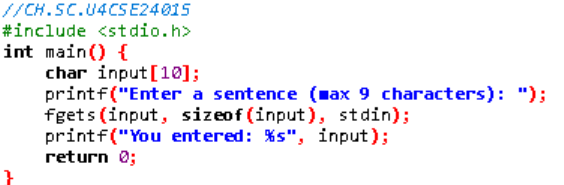


**OUTPUT:**

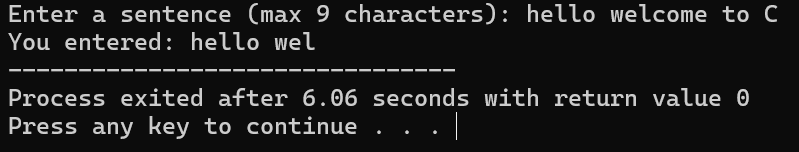
****

68. Print sentence with fgets limit 10

**CODE:**



**OUTPUT:**

****