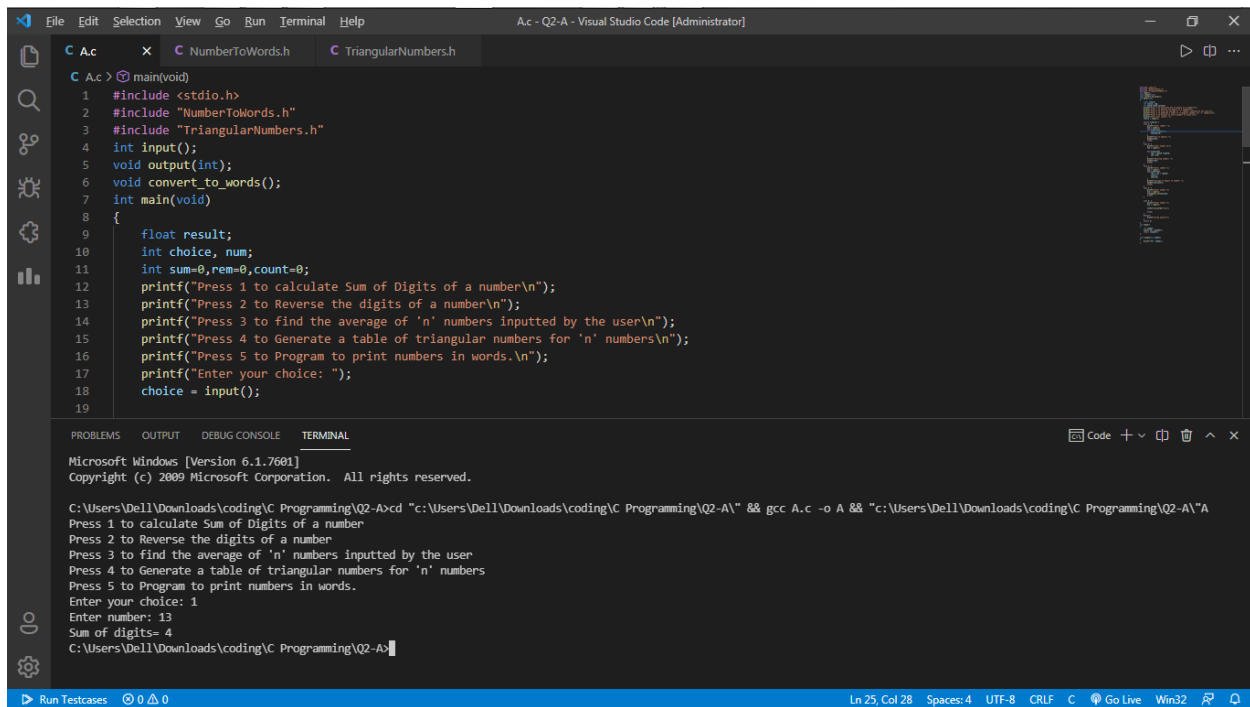


# Outputs for Q2)A)

Q2) a)

a) Sum of Digits of a number



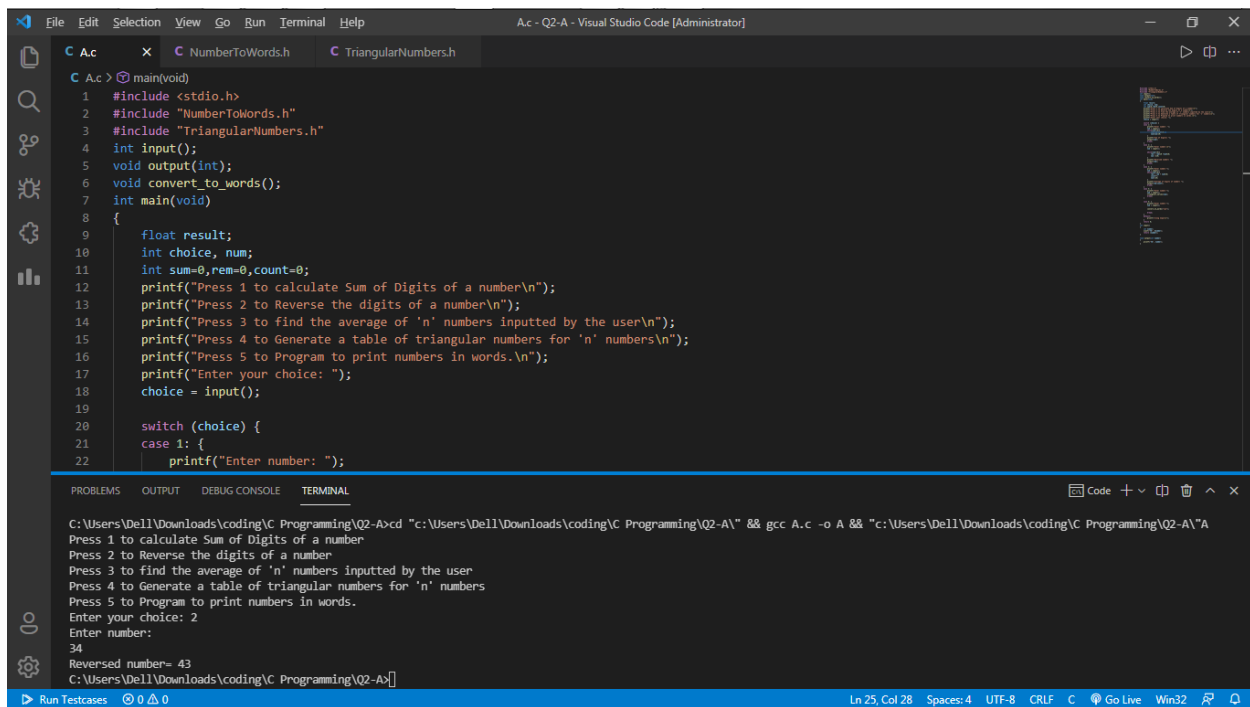
The screenshot shows the Visual Studio Code editor with a C program open. The program includes headers for stdio, NumberToWords, and TriangularNumbers. It defines functions for input, output, and conversion. The main function prompts the user to choose an option (1-5) and then takes a number input. In the terminal, the user has entered '1' for the sum of digits and '13' for the number. The program outputs 'Sum of digits= 4'.

```
C A.c > main(void)
1  #include <stdio.h>
2  #include "NumberToWords.h"
3  #include "TriangularNumbers.h"
4  int input();
5  void output(int);
6  void convert_to_words();
7  int main(void)
8  {
9      float result;
10     int choice, num;
11     int sum=0,rem=0,count=0;
12     printf("Press 1 to calculate Sum of Digits of a number\n");
13     printf("Press 2 to Reverse the digits of a number\n");
14     printf("Press 3 to find the average of 'n' numbers inputted by the user\n");
15     printf("Press 4 to Generate a table of triangular numbers for 'n' numbers\n");
16     printf("Press 5 to Program to print numbers in words.\n");
17     printf("Enter your choice: ");
18     choice = input();
19
20     switch (choice) {
21     case 1: {
22         printf("Enter number: ");
```

Microsoft Windows [Version 6.1.7601]  
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\Dell\Downloads\coding\C Programming\Q2-A>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\" && gcc A.c -o A && "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\" A  
Press 1 to calculate Sum of Digits of a number  
Press 2 to Reverse the digits of a number  
Press 3 to find the average of 'n' numbers inputted by the user  
Press 4 to Generate a table of triangular numbers for 'n' numbers  
Press 5 to Program to print numbers in words.  
Enter your choice: 1  
Enter number: 13  
Sum of digits= 4  
C:\Users\Dell\Downloads\coding\C Programming\Q2-A>

b) Reverse the digits of a number

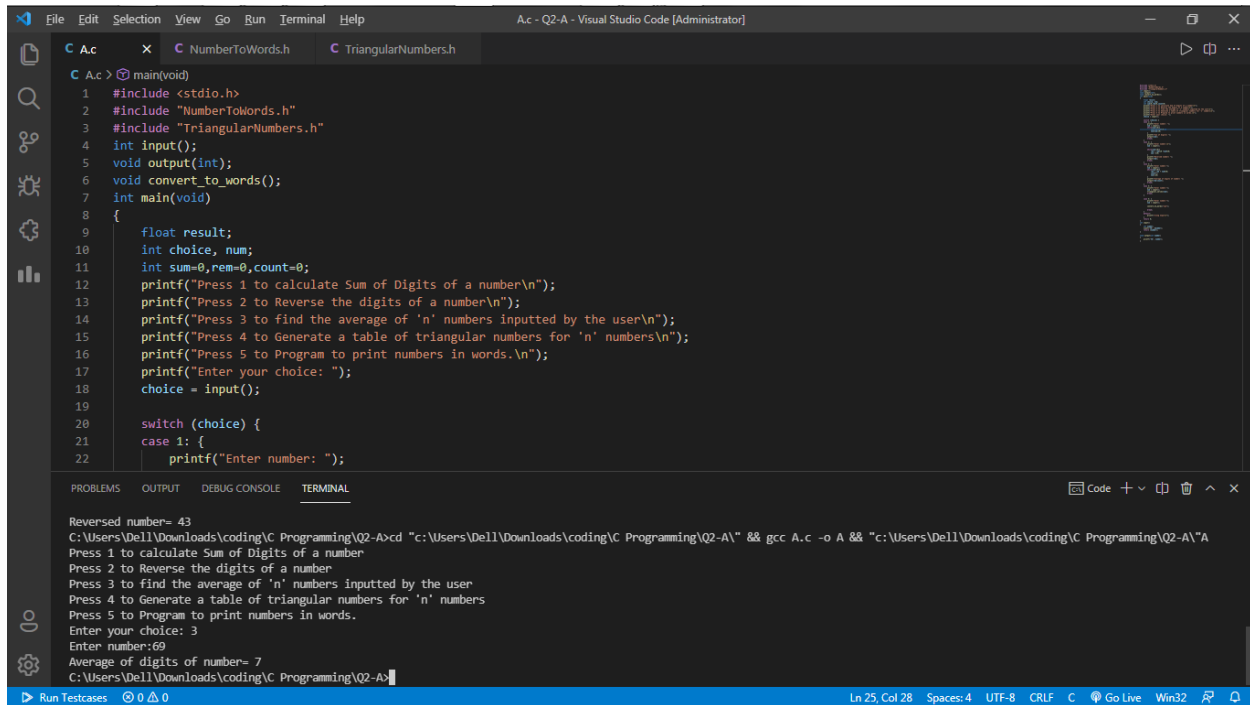


The screenshot shows the same Visual Studio Code editor with the same C program. In the terminal, the user has entered '2' for reversing the digits and '34' for the number. The program outputs 'Reversed number= 43'.

```
C A.c > main(void)
1  #include <stdio.h>
2  #include "NumberToWords.h"
3  #include "TriangularNumbers.h"
4  int input();
5  void output(int);
6  void convert_to_words();
7  int main(void)
8  {
9      float result;
10     int choice, num;
11     int sum=0,rem=0,count=0;
12     printf("Press 1 to calculate Sum of Digits of a number\n");
13     printf("Press 2 to Reverse the digits of a number\n");
14     printf("Press 3 to find the average of 'n' numbers inputted by the user\n");
15     printf("Press 4 to Generate a table of triangular numbers for 'n' numbers\n");
16     printf("Press 5 to Program to print numbers in words.\n");
17     printf("Enter your choice: ");
18     choice = input();
19
20     switch (choice) {
21     case 1: {
22         printf("Enter number: ");
```

C:\Users\Dell\Downloads\coding\C Programming\Q2-A>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\" && gcc A.c -o A && "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\" A  
Press 1 to calculate Sum of Digits of a number  
Press 2 to Reverse the digits of a number  
Press 3 to find the average of 'n' numbers inputted by the user  
Press 4 to Generate a table of triangular numbers for 'n' numbers  
Press 5 to Program to print numbers in words.  
Enter your choice: 2  
Enter number: 34  
Reversed number= 43  
C:\Users\Dell\Downloads\coding\C Programming\Q2-A>

c) Average of 'n' numbers inputted by the user



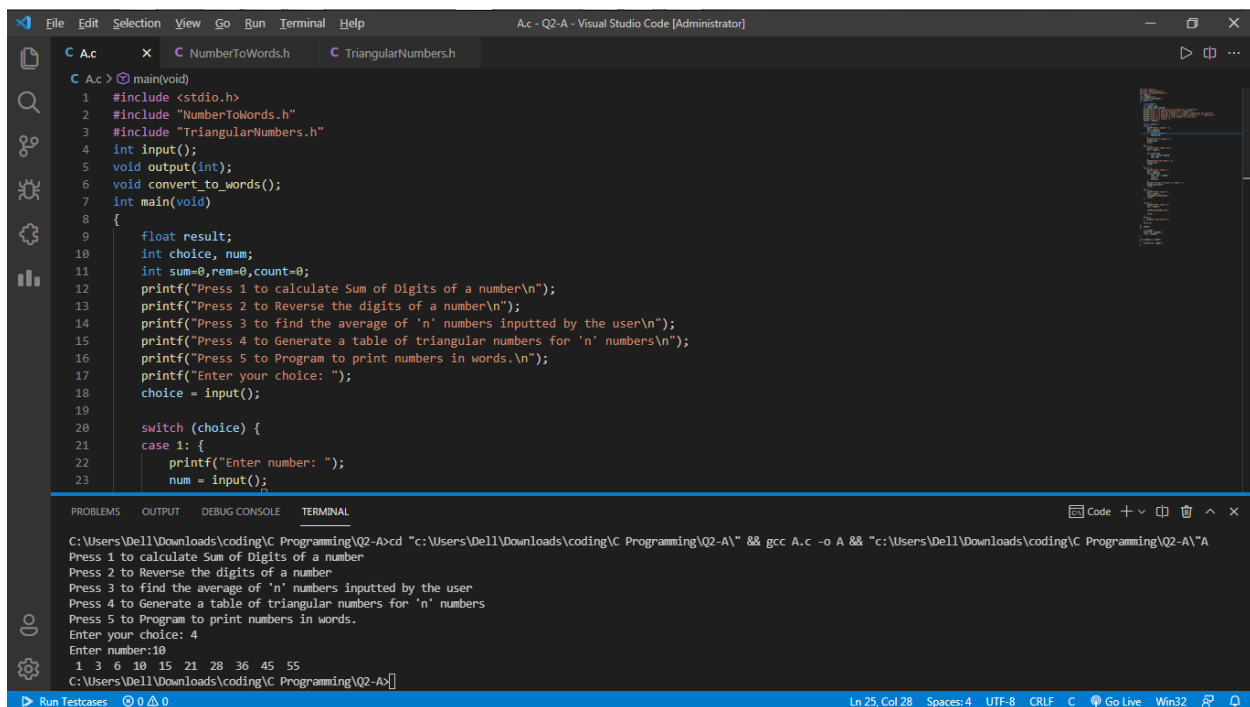
```
File Edit Selection View Go Run Terminal Help
A.c - Q2-A - Visual Studio Code [Administrator]

C A.c x C NumberToWords.h C TriangularNumbers.h

C A.c > main(void)
1 #include <stdio.h>
2 #include "NumberToWords.h"
3 #include "TriangularNumbers.h"
4 int input();
5 void output(int);
6 void convert_to_words();
7 int main(void)
8 {
9     float result;
10    int choice, num;
11    int sum=0,rem=0,count=0;
12    printf("Press 1 to calculate Sum of Digits of a number\n");
13    printf("Press 2 to Reverse the digits of a number\n");
14    printf("Press 3 to find the average of 'n' numbers inputted by the user\n");
15    printf("Press 4 to Generate a table of triangular numbers for 'n' numbers\n");
16    printf("Press 5 to Program to print numbers in words.\n");
17    printf("Enter your choice: ");
18    choice = input();
19
20    switch (choice) {
21    case 1: {
22        printf("Enter number: ");
23        num = input();
24        result = sum_of_digits(num);
25        output(result);
26        break;
27    case 2: {
28        result = reverse_digits(num);
29        output(result);
30        break;
31    case 3: {
32        result = average_of_n_numbers(num);
33        output(result);
34        break;
35    case 4: {
36        result = generate_triangular_numbers(num);
37        output(result);
38        break;
39    case 5: {
40        result = print_numbers_in_words(num);
41        output(result);
42        break;
43    default:
44        printf("Invalid choice\n");
45    }
46    }
47    }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\ DELL\Downloads\coding\C Programming\Q2-A>cd "c:\Users\ DELL\Downloads\coding\C Programming\Q2-A\" && gcc A.c -o A && "c:\Users\ DELL\Downloads\coding\C Programming\Q2-A\"A
Press 1 to calculate Sum of Digits of a number
Press 2 to Reverse the digits of a number
Press 3 to find the average of 'n' numbers inputted by the user
Press 4 to Generate a table of triangular numbers for 'n' numbers
Press 5 to Program to print numbers in words.
Enter your choice: 3
Enter number:69
Average of digits of number= 7
C:\Users\ DELL\Downloads\coding\C Programming\Q2-A>
```

d) Generate a table of triangular numbers for 'n numbers.



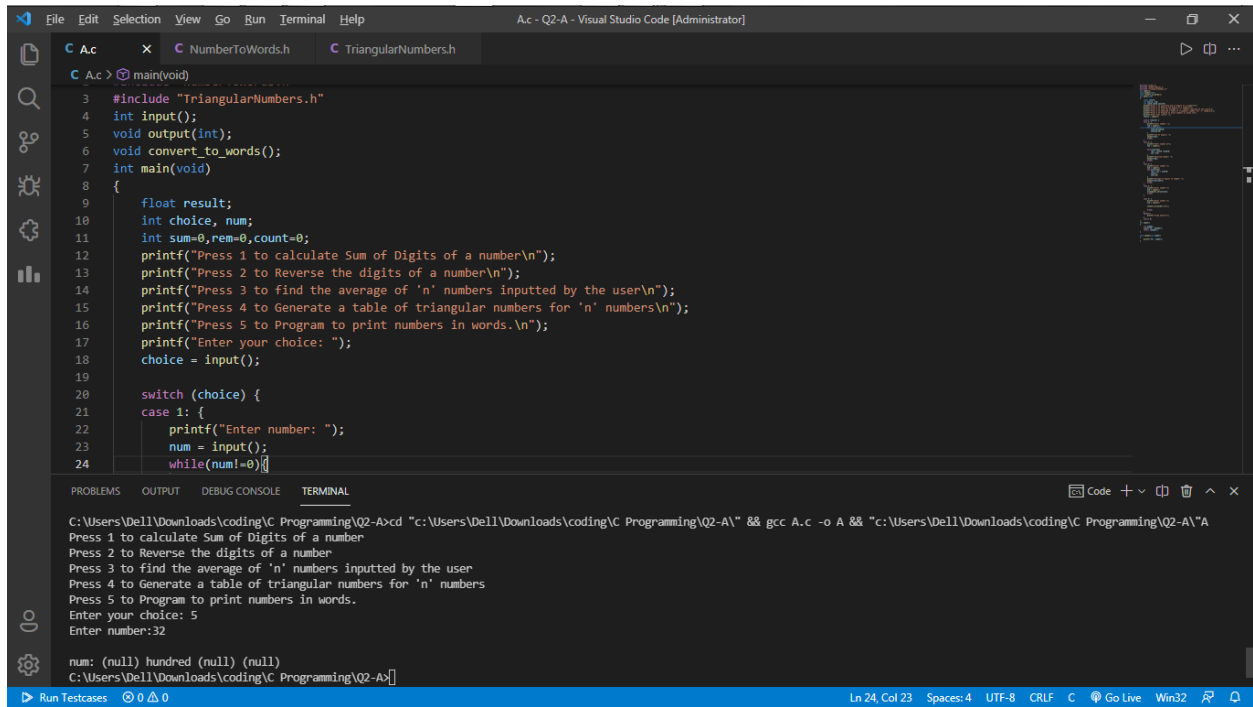
```
File Edit Selection View Go Run Terminal Help
A.c - Q2-A - Visual Studio Code [Administrator]

C A.c x C NumberToWords.h C TriangularNumbers.h

C A.c > main(void)
1 #include <stdio.h>
2 #include "NumberToWords.h"
3 #include "TriangularNumbers.h"
4 int input();
5 void output(int);
6 void convert_to_words();
7 int main(void)
8 {
9     float result;
10    int choice, num;
11    int sum=0,rem=0,count=0;
12    printf("Press 1 to calculate Sum of Digits of a number\n");
13    printf("Press 2 to Reverse the digits of a number\n");
14    printf("Press 3 to find the average of 'n' numbers inputted by the user\n");
15    printf("Press 4 to Generate a table of triangular numbers for 'n' numbers\n");
16    printf("Press 5 to Program to print numbers in words.\n");
17    printf("Enter your choice: ");
18    choice = input();
19
20    switch (choice) {
21    case 1: {
22        printf("Enter number: ");
23        num = input();
24        result = sum_of_digits(num);
25        output(result);
26        break;
27    case 2: {
28        result = reverse_digits(num);
29        output(result);
30        break;
31    case 3: {
32        result = average_of_n_numbers(num);
33        output(result);
34        break;
35    case 4: {
36        result = generate_triangular_numbers(num);
37        output(result);
38        break;
39    case 5: {
40        result = print_numbers_in_words(num);
41        output(result);
42        break;
43    default:
44        printf("Invalid choice\n");
45    }
46    }
47    }

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\ DELL\Downloads\coding\C Programming\Q2-A>cd "c:\Users\ DELL\Downloads\coding\C Programming\Q2-A\" && gcc A.c -o A && "c:\Users\ DELL\Downloads\coding\C Programming\Q2-A\"A
Press 1 to calculate Sum of Digits of a number
Press 2 to Reverse the digits of a number
Press 3 to find the average of 'n' numbers inputted by the user
Press 4 to Generate a table of triangular numbers for 'n' numbers
Press 5 to Program to print numbers in words.
Enter your choice: 4
Enter number:10
1 3 6 10 15 21 28 36 45 55
C:\Users\ DELL\Downloads\coding\C Programming\Q2-A>
```

e) Program to print numbers in words



The screenshot shows the Visual Studio Code editor with a C program titled "NumberToWords.h" and "TriangularNumbers.h". The program is a menu-driven application that allows users to perform various operations on numbers. The terminal output shows the program running successfully, displaying the menu and the user's input.

```
#include "TriangularNumbers.h"
int input();
void output(int);
void convert_to_words();
int main(void)
{
    float result;
    int choice, num;
    int sum=0, rem=0, count=0;
    printf("Press 1 to calculate Sum of Digits of a number\n");
    printf("Press 2 to Reverse the digits of a number\n");
    printf("Press 3 to find the average of 'n' numbers inputted by the user\n");
    printf("Press 4 to Generate a table of triangular numbers for 'n' numbers\n");
    printf("Press 5 to Program to print numbers in words.\n");
    printf("Enter your choice: ");
    choice = input();

    switch (choice) {
    case 1: {
        printf("Enter number: ");
        num = input();
        while(num!=0){
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

C:\Users\Dell\Downloads\coding\C Programming\Q2-A>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\" && gcc A.c -o A && "c:\Users\Dell\Downloads\coding\C Programming\Q2-A\A

Press 1 to calculate Sum of Digits of a number

Press 2 to Reverse the digits of a number

Press 3 to find the average of 'n' numbers inputted by the user

Press 4 to Generate a table of triangular numbers for 'n' numbers

Press 5 to Program to print numbers in words.

Enter your choice: 5

Enter number: 32

num: (null) hundred (null) (null)

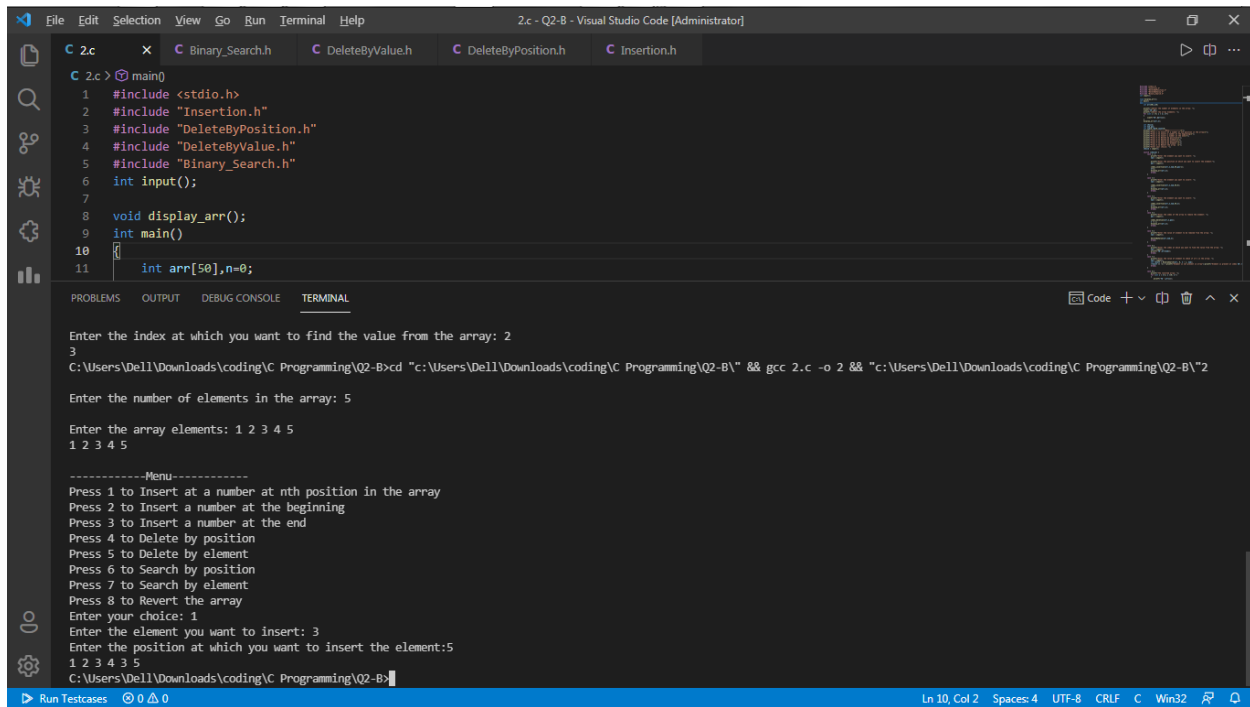
C:\Users\Dell\Downloads\coding\C Programming\Q2-A>

Run Testcases 0 0 0 Ln 24, Col 23 Spaces: 4 UTF-8 CRLF C Go Live Win32

# Outputs for Q2)b)

Q2) B)

a) Insertion at a position in the array



The screenshot shows the Visual Studio Code editor with a C program open. The code includes headers for stdio, Insertion, DeleteByPosition, DeleteByValue, and Binary\_Search. The main function contains an array of size 50 and a menu for various operations. The terminal output shows the program running and the user performing an insertion at position 2.

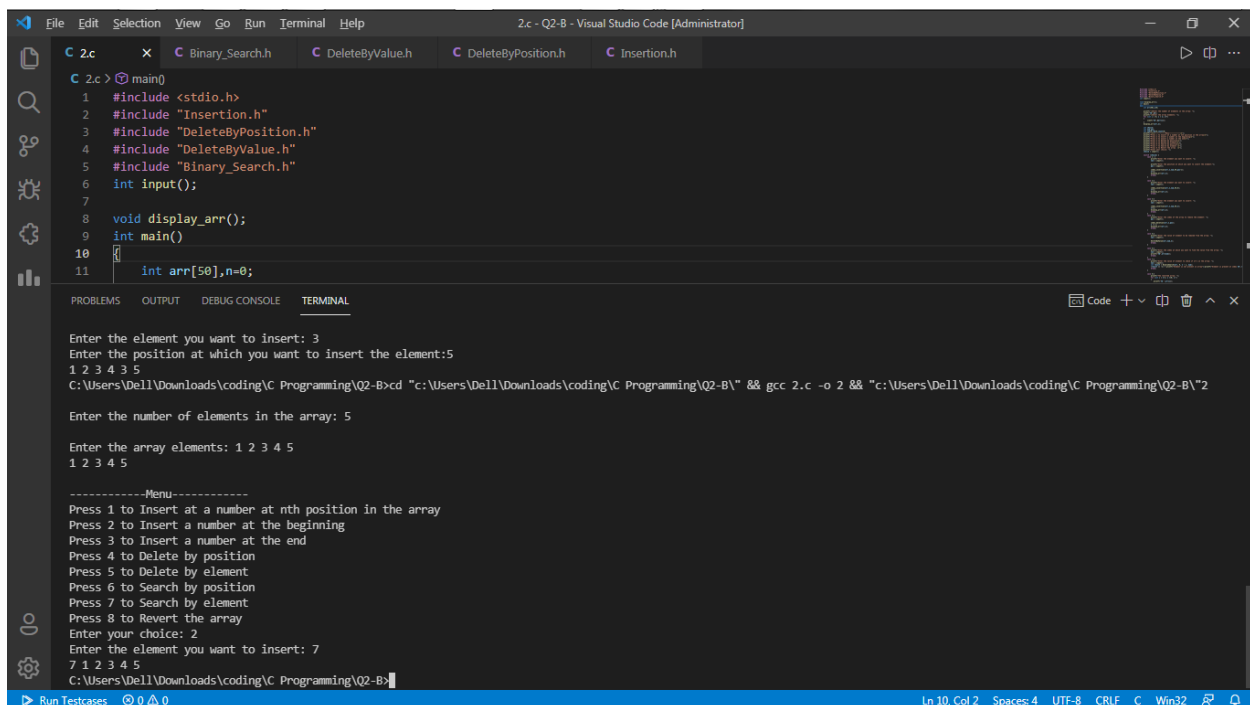
```
C 2.c > main()
1 #include <stdio.h>
2 #include "Insertion.h"
3 #include "DeleteByPosition.h"
4 #include "DeleteByValue.h"
5 #include "Binary_Search.h"
6 int input();
7
8 void display_arr();
9 int main()
10 {
11     int arr[50],n=0;
```

Enter the index at which you want to find the value from the array: 2  
3  
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5  
Enter the array elements: 1 2 3 4 5  
1 2 3 4 5

-----Menu-----  
Press 1 to Insert at a number at nth position in the array  
Press 2 to Insert a number at the beginning  
Press 3 to Insert a number at the end  
Press 4 to Delete by position  
Press 5 to Delete by element  
Press 6 to Search by position  
Press 7 to Search by element  
Press 8 to Revert the array  
Enter your choice: 1  
Enter the element you want to insert: 3  
Enter the position at which you want to insert the element:5  
1 2 3 4 3 5  
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

b) Insertion at beginning



The screenshot shows the Visual Studio Code editor with the same C program as before. The terminal output shows the program running and the user performing an insertion at the beginning of the array.

```
C 2.c > main()
1 #include <stdio.h>
2 #include "Insertion.h"
3 #include "DeleteByPosition.h"
4 #include "DeleteByValue.h"
5 #include "Binary_Search.h"
6 int input();
7
8 void display_arr();
9 int main()
10 {
11     int arr[50],n=0;
```

Enter the element you want to Insert: 3  
Enter the position at which you want to insert the element:5  
1 2 3 4 3 5  
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5  
Enter the array elements: 1 2 3 4 5  
1 2 3 4 5

-----Menu-----  
Press 1 to Insert at a number at nth position in the array  
Press 2 to Insert a number at the beginning  
Press 3 to Insert a number at the end  
Press 4 to Delete by position  
Press 5 to Delete by element  
Press 6 to Search by position  
Press 7 to Search by element  
Press 8 to Revert the array  
Enter your choice: 2  
Enter the element you want to insert: 7  
7 1 2 3 4 5  
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

### c) Insertion at the end

```
2.c - Q2-B - Visual Studio Code [Administrator]
C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h
C 2.c > main()
1 #include <stdio.h>
2 #include "Insertion.h"
3 #include "DeleteByPosition.h"
4 #include "DeleteByValue.h"
5 #include "Binary_Search.h"
6 int input();
7
8 void display_arr();
9 int main()
10
11 int arr[50],n=0;

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Enter your choice: 2
Enter the element you want to insert: 7
7 1 2 3 4 5
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2
Enter the number of elements in the array: 5
Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 3
Enter the element you want to insert: 7
1 2 3 4 5 7
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>
```

### d) Delete by position

```
2.c - Q2-B - Visual Studio Code [Administrator]
C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h
C 2.c > main()
1 #include <stdio.h>
2 #include "Insertion.h"
3 #include "DeleteByPosition.h"
4 #include "DeleteByValue.h"
5 #include "Binary_Search.h"
6 int input();
7
8 void display_arr();
9 int main()
10
11 int arr[50],n=0;
12
13 printf("\nEnter the number of elements in the array: ");
14 scanf("%d",&n);

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2
Enter the number of elements in the array: 5
Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 4
Enter the index of the array to remove the element: 3
1 2 3 5
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>
```

### e) Delete by element (first occurrence of element)

```
File Edit Selection View Go Run Terminal Help
2.c - Q2-B - Visual Studio Code [Administrator]

C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h

C 2.c > main()
22 int choice;
23 int num,pos;
24 int sum=0,rem=0,count=0;
25 printf("\n\n-----Menu-----\n");
26 printf("Press 1 to Insert at a number at nth position in the array\n");
27 printf("Press 2 to Insert a number at the beginning\n");
28 printf("Press 3 to Insert a number at the end\n");
29 printf("Press 4 to Delete by position\n");
30 printf("Press 5 to Delete by element\n");
31 printf("Press 6 to Search by position\n");
32 printf("Press 7 to Search by element \n");
33 printf("Press 8 to Revert the array \n");
34 printf("Enter your choice: ");
35 choice = input();

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5

Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 5
Enter the value of element to be removed from the array: 2
New Array : 1 3 4 5
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

Run Testcases 0 0 0 Ln 10, Col 2 Spaces: 4 UTF-8 CRLF C Win32
```

## f) Search by position

```
File Edit Selection View Go Run Terminal Help
2.c - Q2-B - Visual Studio Code [Administrator]

C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h

C 2.c > main()
1 #include <stdio.h>
2 #include "Insertion.h"
3 #include "DeleteByPosition.h"
4 #include "DeleteByValue.h"
5 #include "Binary_Search.h"
6 int input();
7
8 void display_arr();
9 int main()
10 {
11     int arr[50],n=0;

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloa
ds\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5

Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 6
Enter the index at which you want to find the value from the array: 2
3
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

Run Testcases 0 0 0 Ln 10, Col 2 Spaces: 4 UTF-8 CRLF C Win32
```

## g) Search by element (present or not)

```
File Edit Selection View Go Run Terminal Help
2.c - Q2-B - Visual Studio Code [Administrator]

C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h
C 2.c > main()
22 int choice;
23 int num,pos;
24 int sum=0,rem=0,count=0;
25 printf("\n\n-----Menu-----\n");
26 printf("Press 1 to Insert at a number at nth position in the array\n");
27 printf("Press 2 to Insert a number at the beginning\n");
28 printf("Press 3 to Insert a number at the end\n");
29 printf("Press 4 to Delete by position\n");
30 printf("Press 5 to Delete by element\n");
31 printf("Press 6 to Search by position\n");
32 printf("Press 7 to Search by element \n");
33 printf("Press 8 to Revert the array \n");
34 printf("Enter your choice: ");
35 choice = input();

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5

Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 3
Enter the value of element to check if it's in the array: 3
Element is present at index 2
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

Run Testcases 0 0 0 Ln 10, Col 2 Spaces: 4 UTF-8 CRLF C Win32
```

h) Revert the array (in place)

```
File Edit Selection View Go Run Terminal Help
2.c - Q2-B - Visual Studio Code [Administrator]

C 2.c x C Binary_Search.h C DeleteByValue.h C DeleteByPosition.h C Insertion.h
C 2.c > main()
22 int choice;
23 int num,pos;
24 int sum=0,rem=0,count=0;
25 printf("\n\n-----Menu-----\n");
26 printf("Press 1 to Insert at a number at nth position in the array\n");
27 printf("Press 2 to Insert a number at the beginning\n");
28 printf("Press 3 to Insert a number at the end\n");
29 printf("Press 4 to Delete by position\n");
30 printf("Press 5 to Delete by element\n");
31 printf("Press 6 to Search by position\n");
32 printf("Press 7 to Search by element \n");
33 printf("Press 8 to Revert the array \n");
34 printf("Enter your choice: ");
35 choice = input();
36

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>cd "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\" && gcc 2.c -o 2 && "c:\Users\Dell\Downloads\coding\C Programming\Q2-B\"2

Enter the number of elements in the array: 5

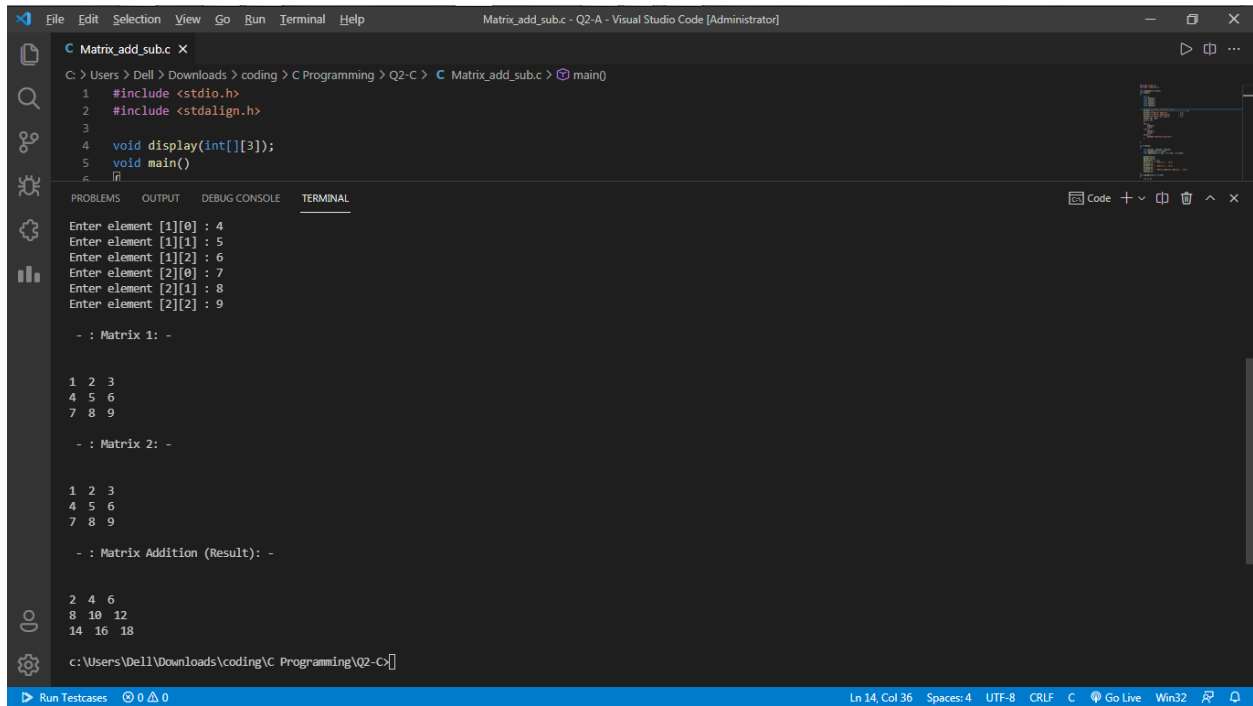
Enter the array elements: 1 2 3 4 5
1 2 3 4 5

-----Menu-----
Press 1 to Insert at a number at nth position in the array
Press 2 to Insert a number at the beginning
Press 3 to Insert a number at the end
Press 4 to Delete by position
Press 5 to Delete by element
Press 6 to Search by position
Press 7 to Search by element
Press 8 to Revert the array
Enter your choice: 8
The reverted array: 5 4 3 2 1
C:\Users\Dell\Downloads\coding\C Programming\Q2-B>

Run Testcases 0 0 0 Ln 10, Col 2 Spaces: 4 UTF-8 CRLF C Win32
```

# Outputs for Q2)C)

## Matrix Addition



The screenshot shows the Visual Studio Code interface with a C program named `Matrix_add_sub.c` open. The program is located at `c:\Users\Dell\Downloads\coding\C Programming\Q2-C>`. The code includes `<stdio.h>` and `<stdlib.h>`, and defines a `display` function for a 3x3 integer array. The `main` function prompts the user to enter elements for two 3x3 matrices. The terminal output shows the user entering the following values:

```
Enter element [1][0] : 4
Enter element [1][1] : 5
Enter element [1][2] : 6
Enter element [2][0] : 7
Enter element [2][1] : 8
Enter element [2][2] : 9
```

The program then displays the two matrices and their sum:

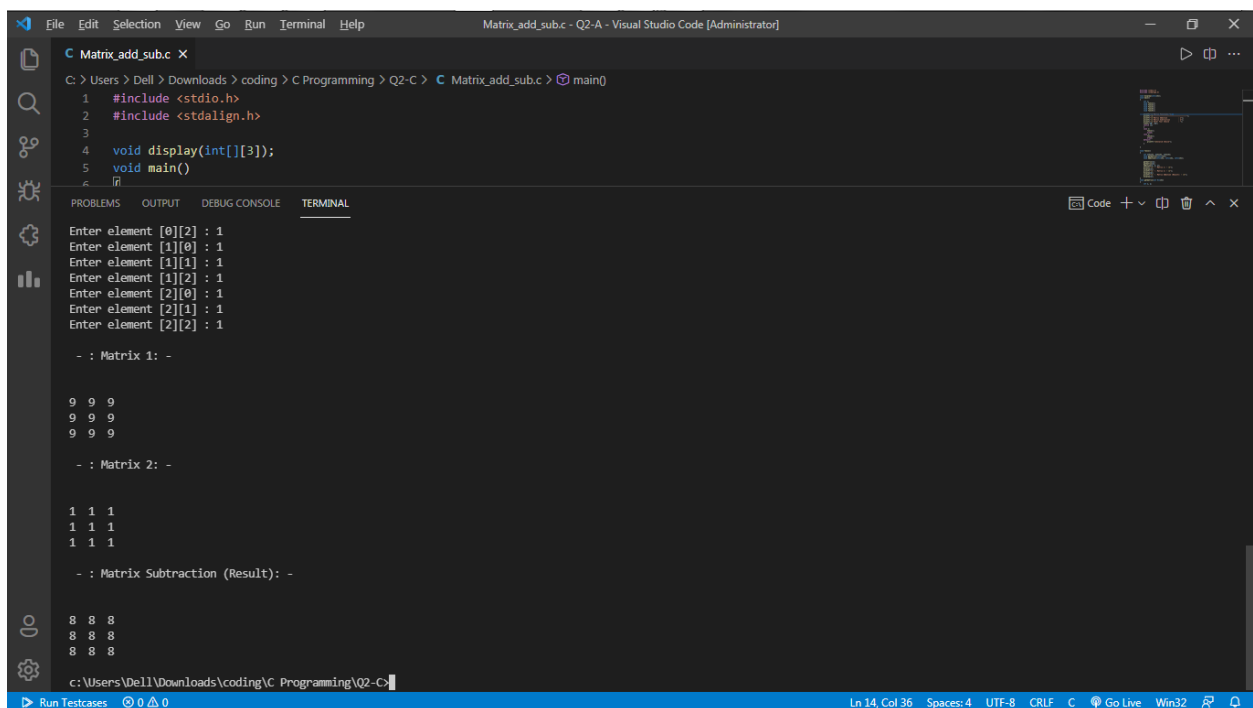
```
- : Matrix 1: -
1 2 3
4 5 6
7 8 9

- : Matrix 2: -
1 2 3
4 5 6
7 8 9

- : Matrix Addition (Result): -
2 4 6
8 10 12
14 16 18
```

The status bar at the bottom indicates the current line and column (Ln 14, Col 36), the file encoding (UTF-8), the line ending (CRLF), and the platform (Win32).

## Matrix Subtraction



The screenshot shows the Visual Studio Code interface with the same C program `Matrix_add_sub.c` open. The program prompts the user to enter elements for two 3x3 matrices. The terminal output shows the user entering the following values:

```
Enter element [0][2] : 1
Enter element [1][0] : 1
Enter element [1][1] : 1
Enter element [1][2] : 1
Enter element [2][0] : 1
Enter element [2][1] : 1
Enter element [2][2] : 1
```

The program then displays the two matrices and their difference:

```
- : Matrix 1: -
9 9 9
9 9 9
9 9 9

- : Matrix 2: -
1 1 1
1 1 1
1 1 1

- : Matrix Subtraction (Result): -
8 8 8
8 8 8
8 8 8
```

The status bar at the bottom indicates the current line and column (Ln 14, Col 36), the file encoding (UTF-8), the line ending (CRLF), and the platform (Win32).