

ASSIGNMENT-2(LIFT OFF-C)

GROUP-11

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The screenshot shows the Visual Studio Code editor with a C program named `quone.c` open. The program is designed to calculate the sum of digits of a number entered by the user. The code is as follows:

```
1 //Write a C program to calculate the sum of digits of a number
2 #include <stdio.h>
3
4 int main()
5 {
6     int num, sum=0;
7
8     /* Input a number from user */
9     printf("Enter any number to find sum of its digit: ");
10    scanf("%d", &num);
11
12    /* Repeat till num becomes 0 */
13    while(num!=0)
14    {
15        /* Find last digit of num and add to sum */
16        sum += num % 10;
17
18        /* Remove last digit from num */
19        num = num / 10;
20    }
21
22    printf("Sum of digits = %d", sum);
23
24    return 0;
25 }
```

The Explorer sidebar on the left shows the project structure with files `quone.c`, `qutwo.c`, `quthree.c`, `qufour.c`, and `qufive.c`. The status bar at the bottom indicates the current position is Line 8, Column 35.

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The screenshot shows the Visual Studio Code terminal window with the following output:

```
Windows PowerShell
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PS C:\Users\DEll\assignment-2> gcc quone.c
PS C:\Users\DEll\assignment-2> .\a.exe
Enter any number to find sum of its digit: 182
Sum of digits = 11PS C:\Users\DEll\assignment-2> |
```

The terminal window is titled "1: powershell". The Explorer sidebar on the left shows the same project structure as the first screenshot. The status bar at the bottom indicates the current position is Line 8, Column 35.

The screenshot shows the Visual Studio Code editor with the file explorer on the left. The 'OPEN EDITORS' list includes 'quone.c', 'qutwo.c', 'quthree.c', 'qufour.c', and 'qufive.c'. The 'ASSIGNMENT-2' folder contains 'a.exe', 'qufive.c', 'qufour.c', 'quone.c', 'quthree.c', and 'qutwo.c'. The 'OUTLINE' view is also visible. The main editor window displays the code for 'qutwo.c'.

```
1 //Write a C program to print the sum of all the even elements and even position elements in an array.
2 #include <stdio.h>
3
4 int main(){
5     int arr[6] = {56, 4, 9, 2, 8, 33};
6     int sum = 0;
7
8     for (int i = 0; i < 6 ; i++)
9     {
10         if (arr[i]%2 == 0)
11         {
12             sum = sum + arr[i];
13         }
14     }
15     for (int i = 0; i < 6 ; i++)
16     {
17         if (i%2 == 0)
18         {
19             sum = sum + arr[i];
20         }
21     }
22     printf("sum = %d",sum);
23
24     return 0;
25 }
```

The status bar at the bottom indicates 'Ln 1, Col 90', 'Spaces: 4', 'UTF-8', 'CRLF', 'C', 'Win32'.

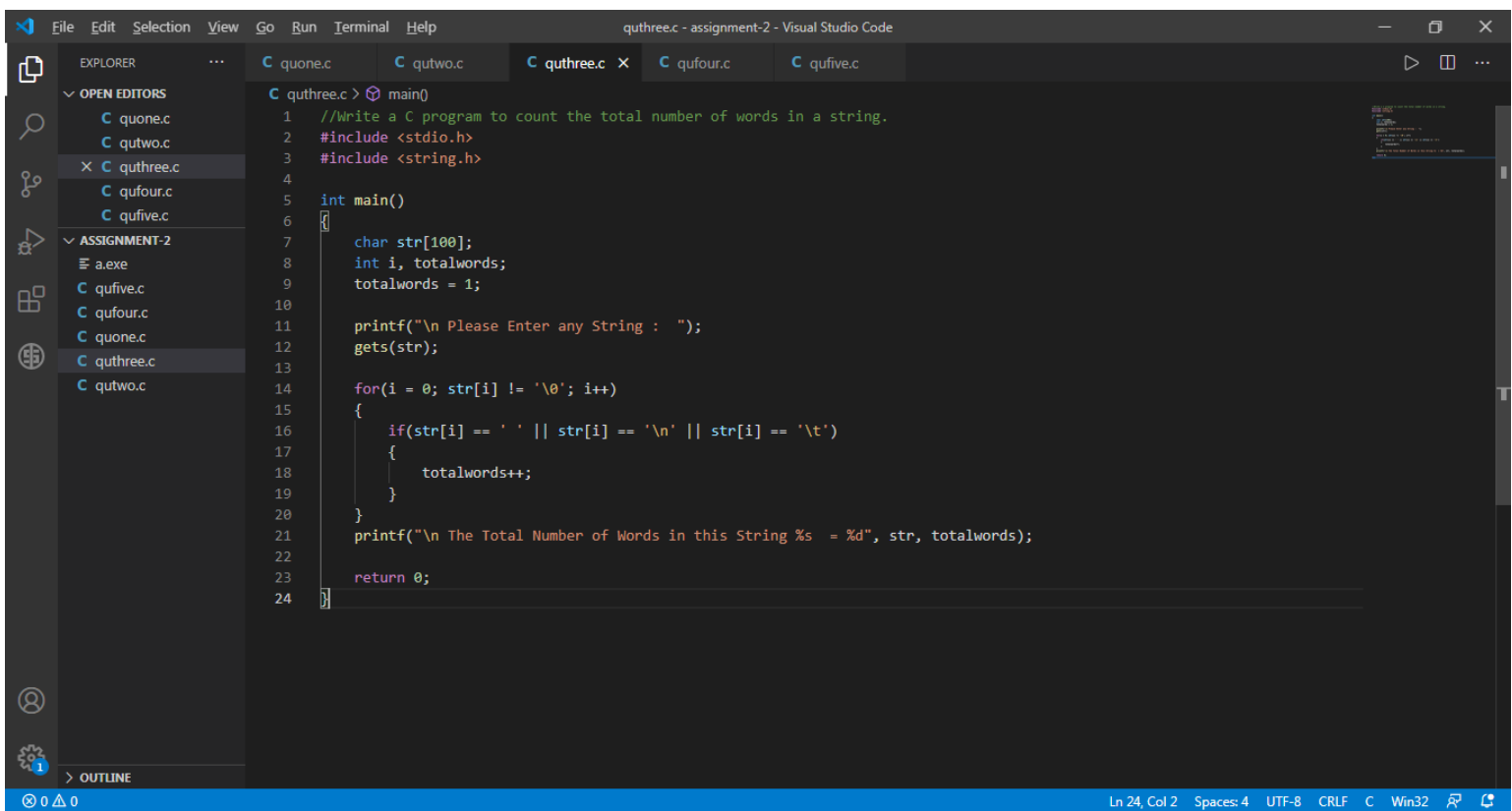
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The screenshot shows the Visual Studio Code editor with the file explorer on the left. The 'OPEN EDITORS' list includes 'quone.c', 'qutwo.c', 'quthree.c', 'qufour.c', and 'qufive.c'. The 'ASSIGNMENT-2' folder contains 'a.exe', 'qufive.c', 'qufour.c', 'quone.c', 'quthree.c', and 'qutwo.c'. The 'OUTLINE' view is also visible. The main editor window displays the code for 'qutwo.c'. The 'TERMINAL' view is open, showing the execution of the program.

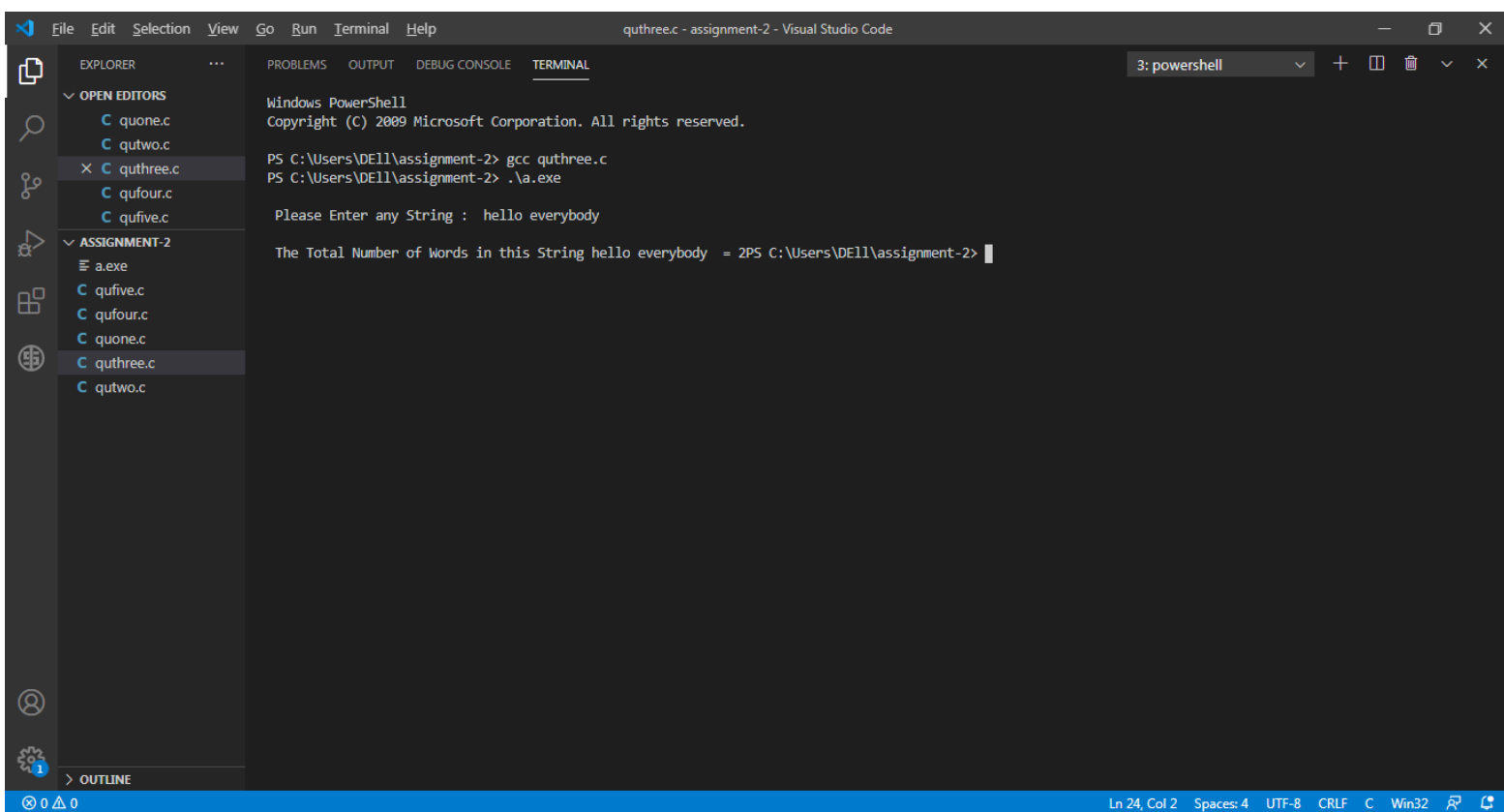
```
2: powershell
Windows PowerShell
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PS C:\Users\DEll\assignment-2> gcc qutwo.c
PS C:\Users\DEll\assignment-2> .\a.exe
sum = 143PS C:\Users\DEll\assignment-2> |
```

The status bar at the bottom indicates 'Ln 1, Col 90', 'Spaces: 4', 'UTF-8', 'CRLF', 'C', 'Win32'.



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The screenshot shows the Visual Studio Code editor with the file explorer on the left. The 'EXPLORER' pane shows a project named 'assignment-2' with several C files: quone.c, qutwo.c, quthree.c, qufour.c (selected), and qufive.c. The 'ASSIGNMENT-2' folder is expanded, showing a.exe, qufive.c, qufour.c, quone.c, quthree.c, and qutwo.c. The main editor window displays the code for qufour.c. The code is a C program that finds the largest and smallest element in an array. It includes a comment at the top: '//Write a C program to find the largest and smallest element in an array.' The code uses printf and scanf for input/output, and a for loop to iterate through the array. The status bar at the bottom indicates 'Ln 1, Col 74', 'Spaces: 4', 'UTF-8', 'CRLF', 'C', and 'Win32'.

```
1 //Write a C program to find the largest and smallest element in an array.
2 #include<stdio.h>
3
4 int main()
5 {
6     int a[50],i,n,large,small;
7     printf("How many elements:");
8     scanf("%d",&n);
9     printf("Enter the Array:");
10
11     for(i=0;i<n;++i)
12         scanf("%d",&a[i]);
13
14     large=small=a[0];
15     for(i=1;i<n;++i)
16     {
17         if(a[i]>large)
18             large=a[i];
19         if(a[i]<small)
20             small=a[i];
21     }
22
23     printf("The largest element is %d",large);
24     printf("\nThe smallest element is %d",small);
25
26     return 0;
27 }
```

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The screenshot shows the Visual Studio Code terminal window. The terminal is titled '4: powershell'. It displays the output of the C program execution. The user has run 'gcc qufour.c' and then './a.exe'. The program prompts for the number of elements (6) and the array elements (12 24 97 50 78 99). The output shows 'The largest element is 99' and 'The smallest element is 12'. The status bar at the bottom indicates 'Ln 10, Col 2', 'Spaces: 4', 'UTF-8', 'CRLF', 'C', and 'Win32'.

```
Windows PowerShell
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PS C:\Users\DELL\assignment-2> gcc qufour.c
PS C:\Users\DELL\assignment-2> .\a.exe
How many elements:6
Enter the Array:12 24 97 50 78 99
The largest element is 99
The smallest element is 12PS C:\Users\DELL\assignment-2> |
```

```
1 //Write a program to print given patterns using loops :
2 #include<stdio.h>
3 int main()
4 {
5     int i,j;
6     for(i=1;i<=5;i++)
7     {
8         for(j=1;j<=5;j++)
9         {
10             if(j==i || (j==5 - i+1))
11                 printf("*");
12             else
13                 printf(" ");
14         }
15         printf("\n");
16     }
17     return 0;
18 }
19
20
```

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```
Windows PowerShell
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PS C:\Users\DEll\assignment-2> gcc qufive.c
PS C:\Users\DEll\assignment-2> .\a.exe
* *
* *
*
* *
* *
* *
PS C:\Users\DEll\assignment-2>
```