**Question 1:**

**Aim:**

The aim of this program is to demonstrate how to initialize and traverse a 2D array in C#. The program loops through the elements of the array and prints each element to the console.

**PROGRAM:**

```csharp
using System;

class Program
{
    static void Main()
    {
        // Initialize a 2D array
        int[,] array = {
            {1, 2, 3},
            {4, 5, 6},
            {7, 8, 9}
        };

        // Loop through the array and print each element
        for (int i = 0; i < array.GetLength(0); i++)
        {
            for (int j = 0; j < array.GetLength(1); j++)
            {
                Console.Write(array[i, j] + " ");
            }
        }
    }
}
```

**Input:**

```csharp
int[,] array = {
    {1, 2, 3},
    {4, 5, 6},
    {7, 8, 9}
}
```

**Output:**
```
1 2 3 4 5 6 7 8 9
```

**Main.cs**

```csharp
1
2   using System;
3
4   class Program
5   {
6       static void Main()
7       {
8           // Initialize a 2D array
9           int[,] array = {
10              {1, 2, 3},
11              {4, 5, 6},
12              {7, 8, 9}
13          };
14
15          // Loop through the array and print each element
16          for (int i = 0; i < array.GetLength(0); i++)
17          {
18              for (int j = 0; j < array.GetLength(1); j++)
19              {
20                  Console.Write(array[i, j] + " ");
21              }
22          }
23      }
24  }
25
```

**Output**

```
mono /tmp/cQWszCTW5Z.exe
1 2 3 4 5 6 7 8 9
=== Code Execution Successful ===
```