Task 3: Arrays and Data Structures

Create an array to store the tracking history of a parcel, where each entry represents a location update.

Implement a method to find the nearest available courier for a new order using an array of couriers.

Code:

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace TaskThree
{
    internal class Program
    {
        static void Main(string[] args)
        {
            while (true)
            {
                Console.WriteLine("\nCourier Management System\n");
                Console.WriteLine("1.Tracking History");
                Console.WriteLine("2.Nearest Available Courier");
                Console.WriteLine("3.Exit");

                Console.Write("Enter your choice: ");
                int choice = int.Parse(Console.ReadLine());

                switch (choice)
                {
                    case 1:
                        TrackingHistory();
```

```
                break;
            case 2:
                NearestCourier();
                break;
            case 3:return;
            default:
                Console.WriteLine("Invalid choice! Please select a valid option.");
                break;
        }
    }

}

static void TrackingHistory()
{

    string[] trackingHistory = {
    "Warehouse - Package received",
    "Sorting Facility - Out for dispatch",
    "City Center - In transit",
    "Customer's Location - Arrived"
};

    Console.WriteLine("\nParcel Tracking History:");
    foreach (string location in trackingHistory)
    {
        Console.WriteLine("- " + location);
    }
}

static void NearestCourier()
{
```

```
        string[] couriers = { "Courier A", "Courier B", "Courier C", "Courier D", "Courier E" };
        int[] distances = { 10, 5, 8, 3, 7 };



        int minIndex = 0;
        for (int i = 1; i < distances.Length; i++)
        {
           if (distances[i] < distances[minIndex])
           {
              minIndex = i;
           }
        }
        Console.WriteLine("Nearest Available Courier :"+ couriers[minIndex]+"Distance :" +
distances[minIndex]+"km");
      }
   }
}
```

Output

```
Courier Management System

1.Tracking History
2.Nearest Available Courier
3.Exit
Enter your choice: 1

Parcel Tracking History:
- Warehouse - Package received
- Sorting Facility - Out for dispatch
- City Center - In transit
- Customer's Location - Arrived

Courier Management System

1.Tracking History
2.Nearest Available Courier
3.Exit
Enter your choice: 2
Nearest Available Courier :Courier DDistance :3km

Courier Management System

1.Tracking History
2.Nearest Available Courier
3.Exit
Enter your choice:
```