

## Average

```
public static double Average(int[] t)
{
    double suma = 0;
    double average;

    for (int i = 0; i < t.Length; i++)
        suma += t[i];

    average = 1.0 * suma / t.Length;

    return average;
}
```

## IndexOf

```
public static int IndexOf(int[] t, int valor)
{
    bool trobat = false;
    int pos = 0;

    while (!trobat && pos < t.Length)
    {
        if(t[pos] == valor){
            trobat = true;
        } else {
            pos++;
        }
    }

    if (!trobat) pos=-1;

    return pos;
}
```

## Contains

```
public static bool Contains(int[] t, int valor)
{
    return IndexOf(t, valor) != -1;
}
```

## CROMOS

```
using System;

public class Program
{
    static void Main(string[] args)
    {
        StreamReader sr = new StreamReader("CROMOS.TXT");

        string linia;
        int[] cromos = new int[121];

        linia = sr.ReadLine();

        while (linia != null)
        {
            int numCromo = Convert.ToInt32(linia);
            cromos[numCromo] += 1;
            linia = sr.ReadLine();
        }

        MostrarCromos(cromos);
    }

    public static void MostrarCromos(int[] taula)
    {
        for (int i = 0; i < taula.Length; i++)
        {
            Console.WriteLine($"CROMOS: {i} || Quantitat de repetits: {taula[i] - 1}");
        }
    }
}
```

## GetEmployeeById

```
public static Employee GetEmployeeById(Employee[] plantilla, int targetId)
{
    Employee target = null;
    bool trobat = false;
    int pos = 0;

    while(!trobat && pos < plantilla.Length)
    {
        if (targetId == plantilla[pos].Id)
        {
            trobat = true;
        } else {
            pos++;
        }
    }

    if(trobat) target = plantilla[pos];

    return target;
}
```

## GetWealthiestEmployee

```
public static Employee GetWealthiestEmployee(Employee[] plantilla)
{
    Employee empleat = null;
    for(int i=0; i< plantilla.Length; i++)
    {
        if(i == 0)
            empleat = plantilla[i];
        else if (empleat.salary < plantilla[i].salary)
            empleat = plantilla[i];
    }
    return empleat;
}
```

## GetEmployeesByLastName

```
public static List<Employee> GetEmployeesByLastName(Employee[] plantilla,
string startOfLastName)
{
    bool validLastName;

    List<Employee> employees = new List<Employee>();

    for (int i=0; i < plantilla.Length; i++)
    {
        validLastName = plantilla[i].LastName.StartsWith(startOfLastName);

        if (validLastName)
        {
            employees.Add(plantilla[i]);
        }
    }
    return employees;
}
```