Lesson 3:

Time Complexity

Exercise : FrgJmp

using System;

class Solution

{

public static int solution(int X, int Y, int D)

{

int r;

r = Y - X;

int r1 = r % D;

Console.WriteLine(r);

Console.WriteLine(r1);

if ((Y - X) % D == 0)

{

return (Y - X) / D;

}

else

{

r = (Y - X) / D;

r1 = r + 1;

Console.WriteLine(r);

Console.WriteLine(r1);

return ((Y - X) / D) + 1;

}

}

static void Main()

{

solution(10, 85, 30);

}

}

using System;

// you can also use other imports, for example:

// using System.Collections.Generic;

// you can write to stdout for debugging purposes, e.g.

// Console.WriteLine("this is a debug message");

class Solution

{

public int solution(int X, int Y, int D)

{

return ((Y - X) % D == 0) ? (Y - X) / D : ((Y - X) / D) + 1;

}

}

Exercise 2:

PermMissing

using System;

using System.Collections.Generic;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

namespace Codility\_Day2

{

class PermMissing

{

public static int solution(int[] A)

{

int low = A[0];

int high = A[0];

for (int i = 0; i < A.Length; i++)

{

if (A[i] < low) low = A[i];

if (A[i] > high) high = A[i];

}

while (low < high)

{

if (Array.IndexOf(A, low) == -1) return low;

low++;

}

return low;

}

static void Main()

{

int[] A = new int[] {5,6,8,9,11};

Console.WriteLine(solution(A));

}

}

}

Exercise 3:

using System;

using System.Linq;

// you can also use other imports, for example:

// using System.Collections.Generic;

// you can write to stdout for debugging purposes, e.g.

// Console.WriteLine("this is a debug message");

class Solution {

public int solution(int[] A) {

int N = A.Length;

int [] sum\_left = new int[N-1];

int [] sum\_right = new int[N-1];

int [] result = new int[N-1];

sum\_left[0] = A[0];

for (int i=1; i<N-1; i++)

{

sum\_left[i] = A[i] + sum\_left[i-1];

}

sum\_right[0] = A[N-1];

for (int i=1; i<N-1; i++)

{

sum\_right[i] = A[N-1-i] + sum\_right[i-1];

}

for (int i=0; i<N-1; i++)

{

result[i] = Math.Abs(sum\_left[i] - sum\_right[N-2-i]);

}

int min\_diff = result.Min();

return min\_diff;

// write your code in C# 6.0 with .NET 4.5 (Mono)

}

}