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

namespace statistics_project
{
    internal class Program
    {
        static void Main(string[] args)
        {
            ;int Q = 0
            ;int Q1 = 0, Q3 = 0
            ;double median = 0f
            ;int s = 0, old_counter = 0, new_counter = 0, mode = 0
            ;double sum_for_div = 0f
            ;Console.WriteLine(" how many numbers would you like to enter ?")
            ;int x = int.Parse(Console.ReadLine())
            ;int[] nums = new int[x]
            ;Console.WriteLine("Enter numbers ")
            for (int i = 0; i < x; i++)
            {
                ;nums[i] = int.Parse(Console.ReadLine())
            }
            {
                for (int i = 0; i < 1000; i++)
                {
                    for (int k = 0; k < x - 1; k++)
                    {
                        if (nums[k] > nums[k + 1])
                        {

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;s = nums[k]
;nums[k] = nums[k + 1]
;nums[k + 1] = s
{
{
{

MEDIAN//
if (x % 2 == 0)
}
;int first = nums[x / 2]
;int second = nums[(x / 2) - 1]
;int sum = nums[first] + nums[second]
;median = sum / 2
{
Else
}
;int g = x + 1
;int median_index = (g / 2) - 1
;median = nums[median_index]
{

Q1,Q3//
;Console.WriteLine("if you would like more than one quarter please enter 1 ")
;int choice = int.Parse(Console.ReadLine())
if (choice == 1)
}
for (int i = 0; i < 2; i++)
}
;Console.WriteLine("please enter which quarter you would like either 1 or 3")
;int EQ = int.Parse(Console.ReadLine())

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;Q = Quarter(x, EQ)
;Q = Q - 1
if (EQ == 1)
}
;Q1 = nums[Q + 1]
{
else
}
;Q3 = nums[Q]
{

{

MODE//
for (int i = 0; i < x - 1; i++)
}
for (int j = i + 1; j < x - 1; j++)
}
if (nums[i] == nums[j])
}
;new_counter += 1
{
{
if (new_counter > old_counter)
}
;old_counter = new_counter
;mode = nums[i]
{
{
range//

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;int range = nums[x - 1] - nums[0]
MEAN//
;int sum_for_mean = 0
for (int i = 0; i < x; i++)
{
;sum_for_mean = sum_for_mean + nums[i]
{
;double mean = sum_for_mean / x
standard division //
for (int i = 0; i < x; i++)
}
;sum_for_div = sum_for_div + ((nums[i] - mean) * (nums[i] - mean))
{
;double standard_division = sum_for_div / x
p90//
;int N_p90 = x/9
;int p90 = nums[N_p90]
summation of divisions//
;double sub_d = 0
;double sum_d = 0
for (int i = 0; i < x; i++)
}
;sub_d = nums[0] - mean
;sum_d = sub_d + sum_d
{

outliers//
;double IQR = Q3-Q1
;double H_outliere = Q3 + 1.5 * (IQR)
;double L_outliere = Q1 - 1.5 * (IQR)

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output//

Console.WriteLine(" the mode is : {0} , the range is : {1} , the median is : {2} , the meam is :
{3} , standard division is : {4} , the p90 is : {5} , sum of deviation is : {6} ", mode, range, median, mean,
;standard_division, p90, sum_d)

;Console.WriteLine(" Q1 = {0} , Q2 = {1},IQR = {2} ", Q1, Q3,IQR)

if (nums[0] < L_outliere && nums[x - 1] > H_outliere)
}

;Console.WriteLine("high outlier is {0} & lower outlier is {1} ", H_outliere, L_outliere)
{
else if (nums[0] < L_outliere)
}

;Console.WriteLine("lower outlier is {0}", L_outliere)
{
else if (nums[x - 1] > H_outliere)
}

;Console.WriteLine("high outlier is {0}", H_outliere)
{
;else Console.WriteLine("no outliers found ")
;())Console.ReadKey
{
static int Quarter(int x, int EQ)
}

;int s = (EQ * (x + 1)) / 4
if (EQ == 2)
;s = s - 1
;return s
{
{
{

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