WINIT thinking mobile

Win Information Technology Pvt. Ltd.

NOTE:

- Test Duration - 30 mins
- Attempt question in C++/ Java / C#
- Do not write anything on question paper

SET A

Qus 1

Missing number in Integer array of size N. N means largest number.

Condition- The array should be traversed only once, which means only one loop to visit each array element only once. Don't use inbuilt function and sorting conditions.

Input:
[1, 2, 3, 4, 6, 9, 8, 10]
int N = 10

Output:
5,7

Given:- int[] nums = {1, 2, 3, 4, 6, 8, 9, 10};

output = 5, 7

```
static void Main()
{
    int[] nums = {1, 2, 3, 4, 6, 8, 9, 10};

    int count = 0, first = 0, last = 0;

    for (int i=0; i < nums.Length ; i++)
    {   count++;
        if( nums[i] != count && first == 0)
        {
            first = count;
            i--;
            Console.Write (first + ", ");
        }
        else if (nums[i] != count)
        {
            last = count;
            i--;
            Console.Write (last + ", ");
        }
    }
}
```

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Instructions for interview

1. Do turn off your cell phone
2. Test Duration - 45 mins
3. Do not write anything on question paper

Q.1. Given an array of integers temperatures represents the daily temperatures, return an array answer such that answer[i] is the number of days you have to wait after the ith day to get a warmer temperature. If there is no future day for which this is possible, keep answer[i] == 0 instead.

Example:

Input: temperatures = [73,74,75,71,69,72,76,73]
Output: [1,1,4,2,1,1,0,0]

Given:-

int [ ] temp = {73, 74, 75, 71, 69, 72, 76, 73};

output = {1, 1, 4, 2, 1, 1, 0, 0}.

Sol

```
static void Main ( )
{
  int [ ] temp = {73, 74, 75, 71, 69, 72, 76, 73};
  int [ ] dis = new int [temp. Length];
for (int i=0 ; i< temp. Length ; i++)
{
 for(int j=i+1 ; j< temp. Length ; j++)
  {
     if ( temp[i] < temp[j])
     {
       dis[i] = j - i ;
       break;
     }
  }
  Console. Write ( dis[i] +" , ");
}
}
```

Print pattern without using for loops

```
1
2 2
3 3 3
4 4 4 4
```

Ans

```
static void Main ()
{
 Console.Write("Enter no:of rows:");
 int r= Convert.ToInt32(Console.ReadLine());
 int i=01; int j=1;
 while (i<=r)
 {
   if (j<=i)
   {
     Console.Write(j);
     j++;
     Continue;
   }
   else
   {
     i++;
     j=1;
   }
 Console.WriteLine();
 }
}
```

swapping the given string "BALAGARU"

```
static void Main()
{
    string name = "BALAGARU";
    char[] name1 = name.ToCharArray();
    string name2 = "";
for (int i = name1.Length - 1 ; i >= 0 ; i--)
    {
        name2 += name1[i];
    }
    Console.WriteLine(name2);
```

Q. There is an array with every element repeated twice except one. Find that element?

For example if given array is {1,5,1,4,3,2,4,2,5} then your program should return 3.

You should NOT use a sorting algorithm to solve this problem.

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1. **Given two integer arrays nums1 and nums2, print the maximum length of a subarray that appears in both arrays.**

   Input: nums1 = [1,2,3,2,1], nums2 = [3,2,1,4,7]
   Output: 3
   Explanation: The repeated subarray with maximum length is [3,2,1].

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