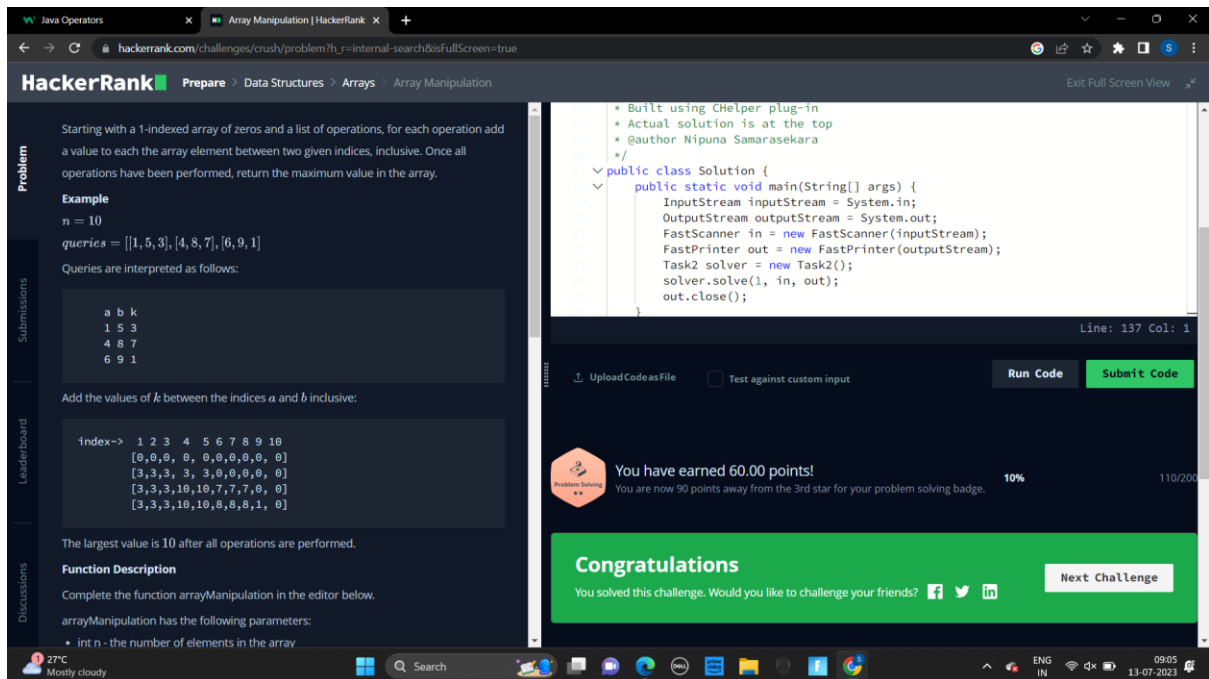


DAY-4 HackerRank

1.Array Manipulation



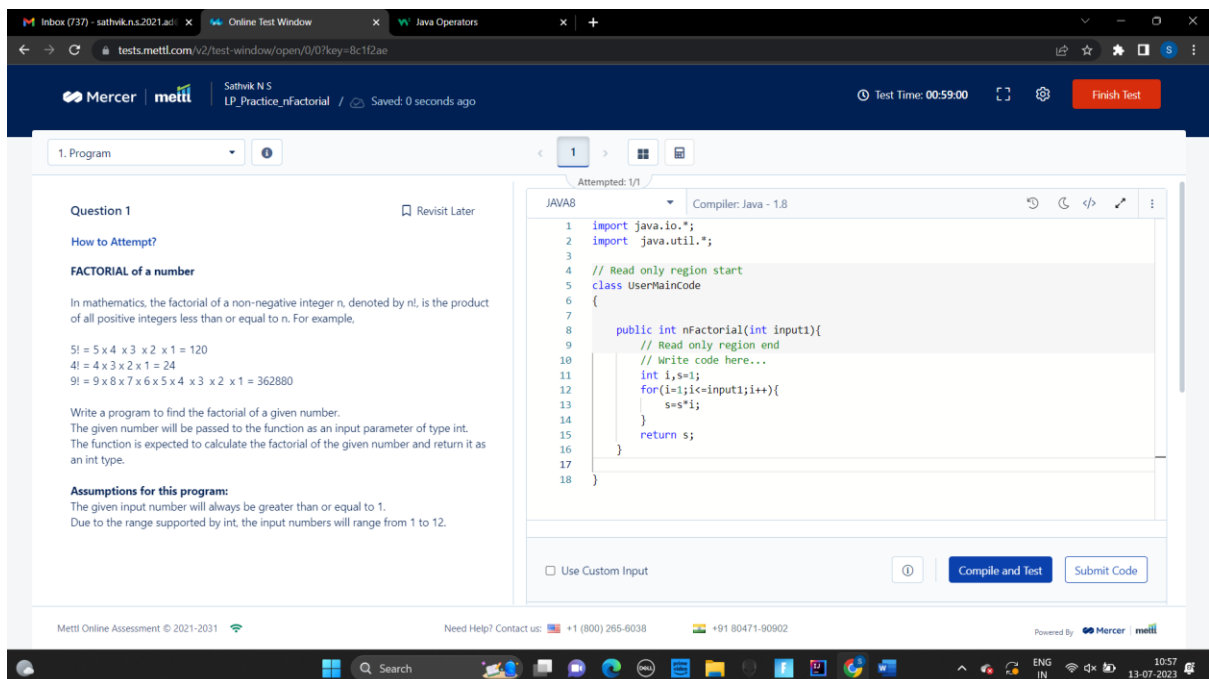
The screenshot shows the HackerRank interface for the 'Array Manipulation' challenge. The problem description on the left states: 'Starting with a 1-indexed array of zeros and a list of operations, for each operation add a value to each the array element between two given indices, inclusive. Once all operations have been performed, return the maximum value in the array.' An example is provided with $n = 10$ and queries $[[1, 5, 3], [4, 8, 7], [6, 9, 1]]$. A table shows the state of the array after each query. The function description asks to complete the `arrayManipulation` function. The right side shows a Java solution using a `Task2` solver. The solution code is as follows:

```
import java.io.*;
import java.util.*;

public class Solution {
    public static void main(String[] args) {
        InputStream inputStream = System.in;
        OutputStream outputStream = System.out;
        FastScanner in = new FastScanner(inputStream);
        FastPrinter out = new FastPrinter(outputStream);
        Task2 solver = new Task2();
        solver.solve(1, in, out);
        out.close();
    }
}
```

Below the code, a green banner displays 'Congratulations' and 'You solved this challenge. Would you like to challenge your friends?' with social media icons. A 'Next Challenge' button is also visible.

2.Factorial of a number



The screenshot shows the Mettl online test interface for the 'Factorial of a number' question. The question text explains that the factorial of a non-negative integer n , denoted by $n!$, is the product of all positive integers less than or equal to n . Examples are given: $5! = 5 \times 4 \times 3 \times 2 \times 1 = 120$, $4! = 4 \times 3 \times 2 \times 1 = 24$, and $9! = 9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 2 \times 1 = 362880$. The task is to write a program to find the factorial of a given number, which will be passed as an input parameter of type `int`. The function is expected to calculate the factorial and return it as an `int` type. Assumptions state that the input number will always be greater than or equal to 1, and the input numbers will range from 1 to 12. The right side shows a Java solution using a `nFactorial` function. The solution code is as follows:

```
import java.io.*;
import java.util.*;

// Read only region start
class UserMainCode
{
    public int nFactorial(int input1){
        // Read only region end
        // Write code here...
        int i,s=1;
        for(i=1;i<=input1;i++){
            s=s*i;
        }
        return s;
    }
}
```

At the bottom, there are buttons for 'Compile and Test' and 'Submit Code'.

3. isPrime

The screenshot shows an online coding test interface for the 'isPrime' problem. The browser address bar shows the URL: `tests.mettl.com/v2/test-window/open/Q/0?key=b1efaa3d`. The page header includes the Mettl logo, the user name 'Sathwik N S', the problem title 'LP_Practice_isPrime', and a 'Saved: 30 seconds ago' status. A 'Test Time: 00:16:05' timer is visible, along with a 'Finish Test' button.

The main content area is divided into two panels. The left panel, titled 'Question 1', contains the problem description: 'Write a function that finds whether the given number N is Prime or not. If the number is prime, the function should return 2 else it must return 1. Assumption: $2 \leq N \leq 5000$, where N is the given number. Example1: if the given number N is 7, the method must return 2. Example2: if the given number N is 10, the method must return 1.' The right panel is a code editor for 'JAVA8' with 'Compiler: Java - 1.8'. It contains the following code:

```
1  import java.io.*;
2  import java.util.*;
3  // Read only region start
4  class UserMaincode
5  {
6
7
8      public int isPrime(int input1){
9          // Read only region end
10         // Write code here...
11         int i;
12         for(i=2;i<input1;i++){
13             if(input1%i==0){
14                 return 1;
15             }
16         }
17         return 2;
18     }
19 }
20
21
```

At the bottom of the code editor, there is a checkbox for 'Use Custom Input' and buttons for 'Compile and Test' and 'Submit Code'.

The footer of the page includes the Mettl logo, copyright information '© 2021-2021', contact information '+1 (800) 265-6038' and '+91 80471-90902', and the text 'Powered By Mettl'.