**DAA SKILL**

**WEEK 9**

**A. Neeharika**

**2300030030**

**PRIME DATES**

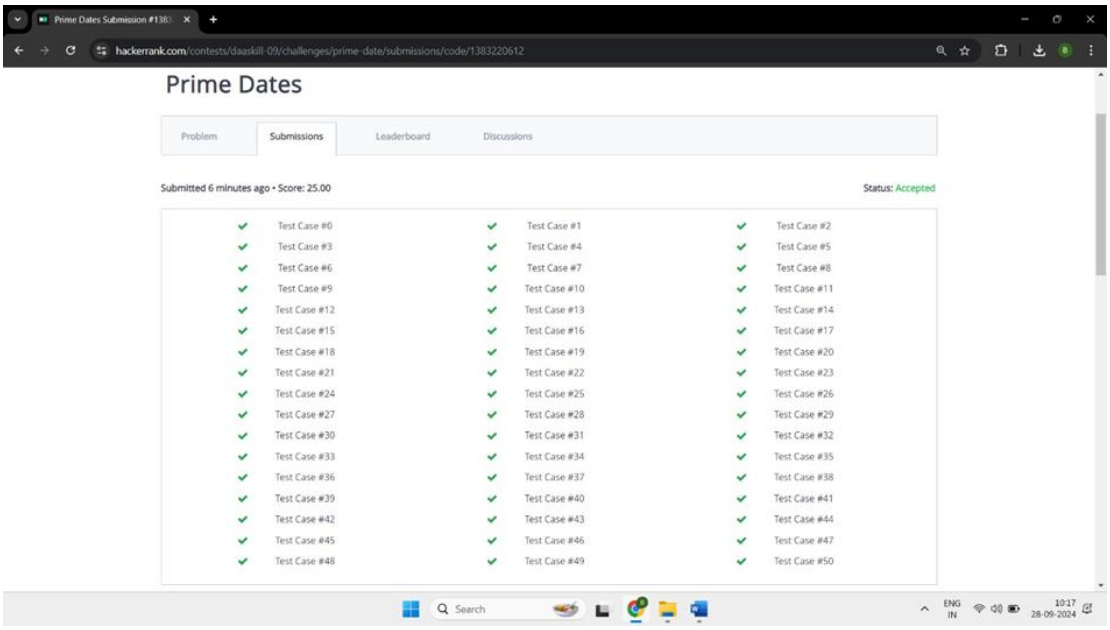
**PROGRAM:**

```
import re
month = []
def updateLeapYear(year):
    if year % 400 == 0:
        month[2] = 29
    elif year % 100 == 0:
        month[2] = 28
    elif year % 4 == 0:
        month[2] = 29
    else:
        month[2] = 28
def storeMonth():
    month[1] = 31
    month[2] = 28
    month[3] = 31
    month[4] = 30
    month[5] = 31
    month[6] = 30
```

```
    month[7] = 31
    month[8] = 31
    month[9] = 30
    month[10] = 31
    month[11] = 30
    month[12] = 31
   def findPrimeDates(d1, m1, y1, d2, m2, y2): storeMonth()
    result = 0
    while(True): x = d1
    x = x * 100 + m1 x = x * 10000 + y1
    if x % 4 == 0 or x % 7 == 0: result = result + 1
    if d1 == d2 and m1 == m2 and y1 == y2: break
    updateLeapYear(y1) d1 = d1 + 1
    if d1 > month[m1]: m1 = m1 + 1
    d1 = 1
    if m1 > 12:
    y1 = y1 + 1 m1 = 1
    return result;
    for i in range(1, 15): month.append(31)
    line = input()
    date = re.split('-| ', line)
d1 = int(date[0])
m1 = int(date[1])
y1 = int(date[2])
d2 = int(date[3])
m2 = int(date[4])
```

```
y2 = int(date[5])
result = findPrimeDates(d1, m1, y1, d2, m2, y2)
print(result)
```

**Output:**



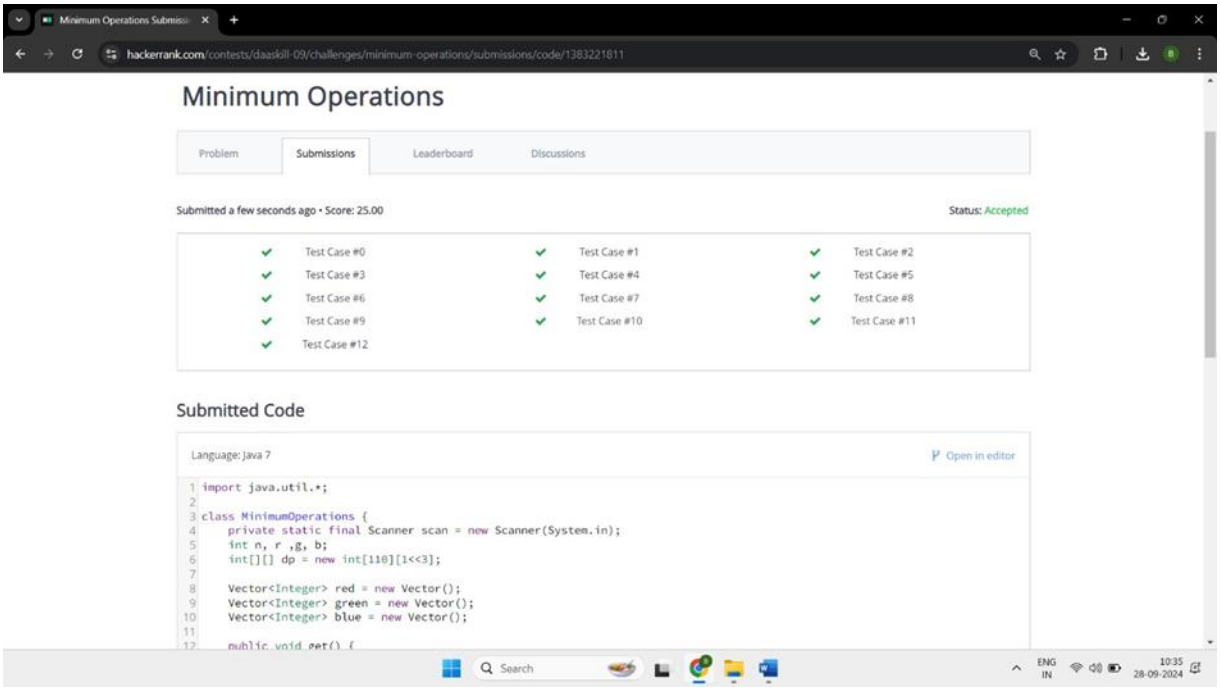
**2.MINIMUM OPERATIONS**

**PROGRAM:**

```
import java.util.*;

class MinimumOperations {
private static final Scanner scan = new Scanner(System.in);
int n, r ,g, b;
int[][] dp = new int[110][1<<3];

Vector<Integer> red = new Vector();
Vector<Integer> green = new Vector();
Vector<Integer> blue = new Vector();

public void get() {
n = scan.nextInt();

for (int i = 0; i < n; i++) {
r = scan.nextInt();
g = scan.nextInt();
b = scan.nextInt();
red.add(r);
green.add(g);
blue.add(b);
}

}


public void minOperations() {
int i, j;
for (i = 0; i <= n; i++) {
for (j = 0; j <= 7; j++) {
dp[i][j] = (1<<30);
}

}

dp[0][0] = 0;
```

```
for (i = 0; i < n; i++){
for (j = 0; j <= 7; j++){
dp[i + 1][j | 1] = Math.min(dp[i + 1][j | 1], dp[i][j] + green.get(i) + blue.get(i));
dp[i + 1][j | 2] = Math.min(dp[i + 1][j | 2], dp[i][j] + red.get(i) + blue.get(i));
dp[i + 1][j | 4] = Math.min(dp[i + 1][j | 4], dp[i][j] + red.get(i) + green.get(i));
}

}

j = 0;
for (i = 0; i < n; i++){
if (green.get(i) != 0) j |= 1;
if (red.get(i) != 0) j |= 2;
if (blue.get(i) != 0) j |= 4;
}

if (dp[n][j] >= (1<<30)) dp[n][j] = -1;
System.out.println(dp[n][j]);
}

}

class Solution {
public static void main(String[] args) {
MinimumOperations obj = new MinimumOperations();
obj.get();
obj.minOperations();
}

}
```

**OUTPUT:**


Minimum Operations Submissi
hackerrank.com/contests/daaskill-09/challenges/minimum-operations/submissions/code/1383221811
Minimum Operations
Problem
Submissions
Leaderboard
Discussions
Submitted a few seconds ago • Score: 25.00
Status: Accepted
Test Case #0
Test Case #1
Test Case #2
Test Case #3
Test Case #4
Test Case #5
Test Case #6
Test Case #7
Test Case #8
Test Case #9
Test Case #10
Test Case #11
Test Case #12
Submitted Code
Language: Java 7
Open in editor
1 import java.util.*;
2
3 class MinimumOperations {
4 private static final Scanner scan = new Scanner(System.in);
5 int n, r ,g, b;
6 int[][] dp = new int[110][1<<3];
7
8 Vector<Integer> red = new Vector();
9 Vector<Integer> green = new Vector();
10 Vector<Integer> blue = new Vector();
11
12 public void get() {
Search
ENG
IN
10:35
28-09-2024