Day-2 03/09/2021

Level-Easy

Que-1 Assign cookies:

Input: g = [1,2,3], s = [1,1]

g: grid factor, s: size

output: 1

⇒ // first we sort grid factor as well as size of cookies
// by using STL library vector fn
// then create two pointers
// Run while loop

```
sort(g.begin(), g.end);
sort(s.begin(), s.end());
int p1=0, p2=0;
while(p1<g.size() && p2<s.size())
{
  if(g[p1]<=s[p2] && p2<size())
{ p1++; p2++ }
else { p2++}
return p1;
```

Level-Medium

Que-1 Container with most water

// take two pointers
// increase left by 1 and right by -1;
// max height by subtraction right-left and multip
by min(height[left], right[]);

```
int maxarea = 0;
int left = 0;  int right = height.size() - 1;
while (left < right)
{
    int area = min(height[left], height[right]) * (right - left);
    max area = max(maxarea, area);
    if (Height[left] < Height[right])
        left++;
else
    right--;
}
return maxarea;
```

Ques: KMP algo (longest prefix suffix)

```
// store the size of string in (n).
// create an arr of size (n)
// take two pointer i and j
// i start from 0, j = 1

// first element of arr is (0).

int i=0, j=1;
while (j < n)
if (s[i] == s[len])
{
    len++;
    arr[j] = len;
    i++;
}
// if not match
```

```
    else {
        if (len == 0)
        {
            arr[i] = 0;
            i++;
        }
        else
        {
            len = arr[len-1];
        }
    }
}
    return arr[n-1];
    }
};
```