Find Longest Consequtive Sequeace

```
int findLongestConseqSubseq(int arr[], int n)
   {
    unordered_set<int> us(arr , arr + n);
    int res = 1;
    for(auto a : us)
    {
       if(us.find(a - 1).== us.end())
       {
          int curr = 1;
          while(us.find(a + curr) != us.end())
          curr++;

          res = max(res , curr);
       }
    }
    return res;
   }
```

fill the Set with array element.

if element-1 is not found then this means its a start of new Subsequence

find if element+1, element+2, element+3... is available or not if available increase the current Counter.

Compare the previous result of consecutive element Count with present Consecutive element count

arr[] = {1, 3, 9, 2, 8, 2}

Set S = < 1, 3, 9, 2, 8 >

(1) find 1-1 not in set s means start of new subsequence

curr = 1

Continuously Search in set if 1 + curr is avaible or not and increase the current Counter

→ 1 + 1 → available in set S

curr = 2

→ 1+2 → available in set S

curr = 3

→ 1 + 3 → not available in set S

loop closed

compare res updated if found that curr is greater

(2)

(3)

⋮