



745 (6)

```

public static int Longest_Unique_Subsequence(int[] arr) {
    HashSet<Integer> set = new HashSet<>();
    for (int i = 0; i < arr.length; i++) {
        set.add(arr[i]);
    }
    int ans = 0;
    for (int i = 0; i < arr.length; i++) {
        if (set.contains(arr[i]) && !set.contains(arr[i] - 1)) {
            int c = 0;
            int v = arr[i];
            while (set.contains(v)) {
                c++;
                set.remove(v);
                v++;
            }
            ans = Math.max(ans, c);
        }
    }
    return ans;
}

```

$$\begin{array}{r} 23 \overline{) 14} \\ 5 \overline{) 14} \\ \underline{91} \\ 10 \\ 29 \end{array}$$

$(3, 2)$   
 $(3, 4)$   
 $(3, 5)$   
 $(4, 5)$   
 $(7, 5)$   
 $(7, 10)$

