**package** sljava;

**import** java.util.HashSet;

**class** LongestSubsquenceDemo {

**public** **static** **void** main(String[] args) {

**int**[] arr= {3,2,15,68,4,9,16,8,34};

HashSet<Integer> hs=**new** HashSet<>();

**for**(**int** i=0;i<arr.length;i++) {

hs.add(arr[i]);

}

**int** long\_subs=0;

**for**(**int** i=0;i<arr.length;i++)

{

**if**(!hs.contains(arr[i]-1)) {

**int** number=arr[i];

**while**(hs.contains(number))

{

number++;

}

**if**(long\_subs<number-arr[i])

{

long\_subs=number-arr[i];

}

}

}

System.***out***.println("Longest subsquence length is "+ long\_subs);

}

}