## LONGEST INCREMING SUBJEDUENCE 78 given an array OII of size in, the took is to find the length of the Longest Increasing subsequence (LZS) i.e., the longest possible subsequence in which the elements are sorted in increasing order eg: The have this array 109 2 5 (This is an I sing subsequence) (This is not an Thing subsequence because order matterix) In subsequence : order should be same. as in original array 3 comes after 5, the same should be in subsequence yarte

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19 Mis 99 Pran : prayiff dulli CODE
   CONS? IN? N = 25e2+10;
   VECTOR < INT > A[N];
- Computing length of longest increasing
   INS 138 (3NS !)
     TE (DELI] 11=1-1) RETURN DE EIT;
    FOR (3M7 j= 0; j<i; j++)
     10 ( a[i] > 0[j]) 25.
      in aus = MAX (Aus, 129 (i) + 1);
    REPURN B DP[i] = ANS;
   -> 7.0 legare DP = 0 ( m * 2 m)
   3N3 MUSN (1)
  MEMGER (DP. -11, SIZEOF (DP));
```

	Page No
-	FOR (3MP. i=0; i < m; i+1)
and the same of th	FOR (3MP. 1=0; 1 < m; (+4)
A S	CZN -> a [i];
and the same	the state of the s
	harmon they will you have an high if
· · · · · · · · · · · · · · · · · · ·	INS ANS = 0;
· · · · · · · · · · · · · · · · · · ·	14
	Running for all the numbers of array " ( aguinging them to be les last mo of " LZP)
	all at market prince of the les
	lette na al udesal
	FOR (3N? i=0; i <n; i++)<="" th=""></n;>
	E ANS = MAX (ANS, 135) (i):);
	ANS = MIX (MN)
	3
	cour << Ans << " \ m?";
300	REZURN O;
14	(Cladel a 10 965 5760)
	: (60) peraga e por samo di
	INPUZ:
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	1092537101.18.1 1.21 5002 1.5