

66. Plus One

**** NO USE OF CONVERT TO INTEGER APPROCH**

**** POINTS TO REM=>**

->ADDITION OF TWO SINGLE DIGIT NO NEVER GIVES CARRY MORE THAN 1

=>APPROCH

1->TRAVEL FROM BACK TO 0 ->BECOUSE ADDTION OCCUR FROM RIGHT;

2->IF ELE IS 9 INSERT 0 AT THAT PLACE AND TAKE CARRY =1;

3->IF ELE IS NOT 9 THEN ADD ELE + CARRY TO THE ELEMT

4->SET CARRY TO =0;

5->SINCE THERE IS NO CARRY NO NEED TO GO FARWORD THE NUMBERS WILL BE SAME THEN BREAK;

EDGE CASE

IF ALL VALUES ARE 9

=> IF ALL VALUES ARE NINE NO SIZE WILL INCERSE BY 1 DIGIT

SO WE NEED INSERT ONE ZERO AT END OF THE VECTOR

AND ALL THE VALUES OF ARRY WILL BE ZERO BUT THE CARYY WILL BE LEFT

SO WE WILL REPLCE 0TH ELEMENT WITH CARRY..

9999+1=1 0 0 0 0 =>EDGE CASE

```
1  class Solution {
2  public:
3      vector<int> plusOne(vector<int>& digits) {
4          int c=1;
5          for(int i=digits.size()-1;i>=0;i--){
6              if(digits[i]==9){
7                  digits[i]=0;
8                  c=1;
9
10             }else{
11                 digits[i]=digits[i]+c;
12                 c=0;
13                 break;
14             }
15         }
16         if(c!=0){
17             digits[0]=c;
18             digits.push_back(0);
19         }
20
21         return digits;
22     }
23 };
24
```