Given Array = { 5, 9, 3, 4, 1, 6, 7, 8, 10 }

Algorithm :-

Step 1 :- Find the sum of first N number by using $\frac{N(N+1)}{2}$ formula = t-sum

Step 2 :- Store N as N = arr.length + 1

Step 3 :- Find the sum of given array by using for loop from i=1 to i<arr.length.

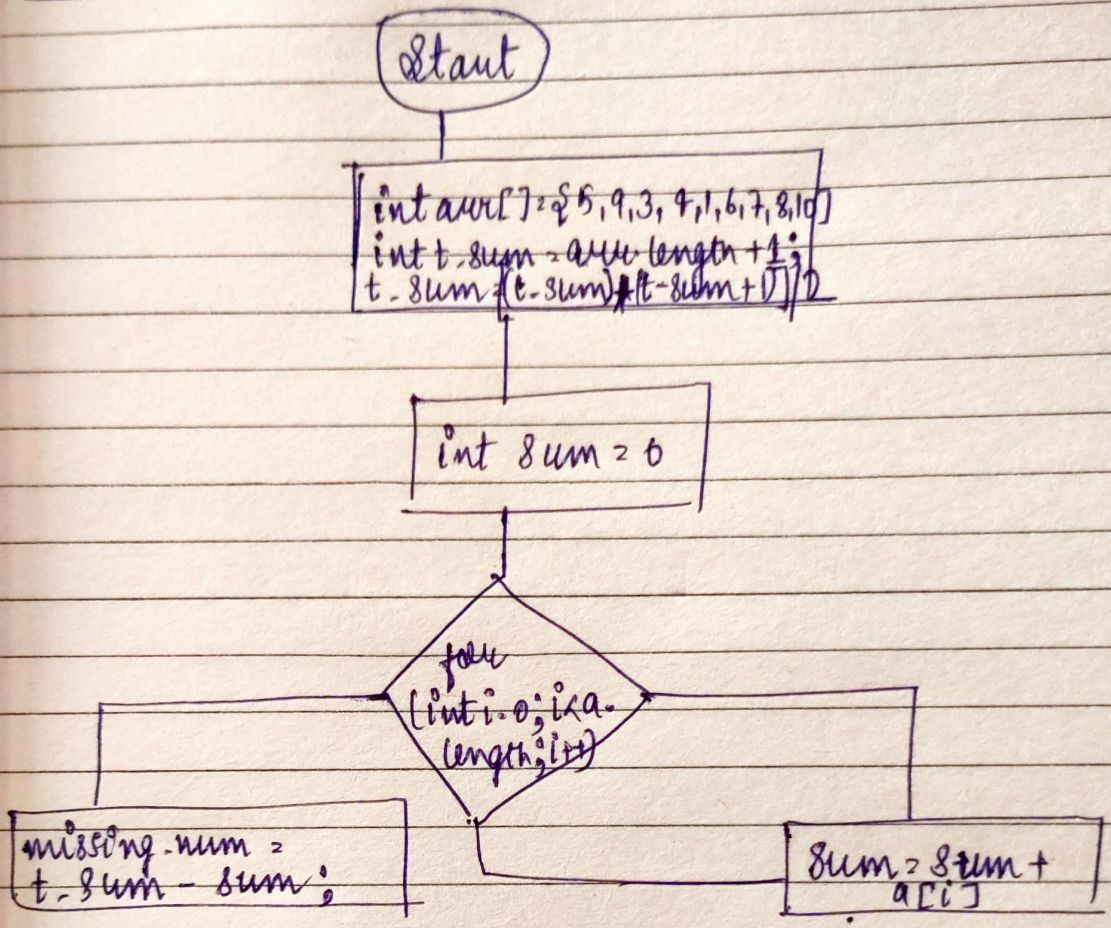
Step 4 :- Take sum as variable & initialize it with 0 and using for loop find sum of no. in array one-by-one

Sum = Sum + a[i]

Step 5 :- Find missing number by substracting step 1 and step 4.

missing-num = t-sum - sum

Flow chart:-



Pseudo code:-

```
int t_sum = arr.length+1;
t_sum = (t_sum*(t_sum+1))/2
int sum = 0;
for (i=0; i<arr.length; i++)
    {
    sum = sum + a[i];
    }
int missing_num = t_sum - sum;
    print missing_num;
```