

Output:

1

Input:

1

3 1 3 5

99

Output:

0

Answer: (penalty regime: 0%)

```
1 #include <stdio.h>
2 int main()
3 {
4     int n,k,t,*l,j;
5     scanf("%d",&t);
6     for(l=0;l<t;l++){
7         scanf("%d",&n);
8         int arr[n];
9         for(j=0;j<n;j++){
10             scanf("%d",&arr[j]);
11         }
12         scanf("%d",&k);
13         int l=0,h=n-1;
14         while(l<h){
15             if(l+h==arr[h]-arr[l]){
16                 l++;
17                 break;
18             }
19             else if(arr[h]-arr[l]<k)
20                 h++;
21             else
22                 l++;
23         }
24         printf("%d\n",t);
25     }
```

Explanation

Test Case 0: N = 1

Sam buys 1 chocolate on day 1, giving us a total of 1 chocolate. Thus, we print 1 on a new line.

Test Case 1: N = 2

Sam buys 1 chocolate on day 1 and 0 on day 2. This gives us a total of 1 chocolate. Thus, we print 1 on a new line.

Test Case 2: N = 3

Sam buys 1 chocolate on day 1, 0 on day 2, and 3 on day 3. This gives us a total of 4 chocolates. Thus, we print 4 on a new line.

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2 int main()
3 {
4     int n,t;
5     scanf("%d",&t);
6     while(t--){
7         scanf("%d",&n);
8         n=(n+1)/2;
9         n=n*n;
10        printf("%d\n",n);
11    }
12    return 0;
13 }
```

	Input	Expected	Got	
✓	3	1	1	✓
	1	1	1	
	2	4	4	
	3			
✓	10	1200	1200	✓
	71	2100	2100	
	100	1040	1040	
	80	720	720	
	54	400	400	
	40	25	25	
	9	1321	1321	
	77	25	25	
	0	40	40	
	13	2401	2401	
	95			

Passed all tests! ✓

Explanation 1

We are given, $n = 5$, $nums = [2, 10, 5, 4, 8]$, $m = 4$, and $masses = [3, 1, 7, 8]$.

- For $masses[0] = 3$, we have 1 element in $nums$ ($nums[0] = 2$) that is $\leq masses[0]$.
- For $masses[1] = 1$, there are 0 elements in $nums$ that are $\leq masses[1]$.
- For $masses[2] = 7$, we have 3 elements in $nums$ ($nums[0] = 2$, $nums[2] = 5$, and $nums[3] = 4$) that are $\leq masses[2]$.
- For $masses[3] = 8$, we have 4 elements in $nums$ ($nums[0] = 2$, $nums[2] = 5$, $nums[3] = 4$, and $nums[4] = 8$) that are $\leq masses[3]$.

Thus, the function returns the array $[1, 0, 3, 4]$ as the answer.

Answer: (penalty points: 0 %)

```

1 //Solution.cpp
2 int main() {
3     int n1, n2, count;
4     scanf("%d", &n1);
5     int a[n1];
6     for (int i = 0; i < n1; i++)
7         scanf("%d", &a[i]);
8     int b[n2];
9     for (int i = 0; i < n2; i++)
10        scanf("%d", &b[i]);
11    for (int k = 0; k < n2; k++) {
12        count = 0;
13        for (int i = 0; i < n1; i++) {
14            if (a[i] <= b[k])
15                count++;
16        }
17        printf("%d\n", count);
18    }
19    return 0;
20 }
21

```

	Input	Expected	Got	
✓	4 1 4 2 4 3 5	2 0	2 0	✓
✓	5 2 10 5 4 4 8 4 2 1 7 8	1 0 3 4	1 0 3 4	✓

Passed all tests! ✓