```c
#include<stdio.h>
int main(){
    int t;
    scanf("%d",&t);
    while(t--){
        int n;
        scanf("%d",&n);
        int a[n];
        for(int i=0;i<n;i++){
            scanf("%d",&a[i]);
        }
        int k;
        scanf("%d",&k);
        int flag=0;
        for(int i=0;i<n;i++){
            for(int j=i+1;j<n;j++){
                if(a[i] - a[j] == k ||a[j] - a[i] ==k){
                    flag = 1;
                    break;
                }
            }
            if(flag)
            break;}
            printf("%d\n",flag);
        }

    return 0;
}
```

	Input	Expected	Got	
✓	1 3 1 3 5 4	1	1	✓
✓	1 3 1 3 5 99	0	0	✓

Passed all tests! ✓

```c
#include<stdio.h>
int main(){
    int t;
    scanf("%d",&t);
    while(t--){
        int n,c=0;
        scanf("%d",&n);
        for(int i=0;i<=n;i++){
            if(i%2!=0){
                c=c+i;
            }
        }
        printf("%d\n",c);
    }
}
```

	Input	Expected	Got	
✓	3 1 2 3	1 1 4	1 1 4	✓
✓	10 71 100 86 54 40 9 77 9 13 98	1296 2500 1849 729 400 25 1521 25 49 2401	1296 2500 1849 729 400 25 1521 25 49 2401	✓

Passed all tests! ✓

```c
#include<stdio.h>
int main(){
    int s1,s2,ans;
    scanf("%d",&s1);
    int ta[s1];
    for(int i=0;i<s1;i++)
    scanf("%d",&ta[i]);
    scanf("%d",&s2);
    int tb[s2];
    for(int i=0;i<s2;i++)
    scanf("%d",&tb[i]);
    for(int j=0;j<s2;j++){
        ans=0;
        for(int i=0;i<s1;i++){
            if(tb [j] >=ta[i])
            ans++;
        }
        printf("%d\n",ans);
    }
}
```

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

2 x 10 = 20

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
int main(){
    int n;
    scanf("%d",&n);
    for(int i=1;i<=10;i++){
        printf("%d x %d = %d\n",n,i,n*i);
    }
}
```

	Input	Expected	Got	
✓	2	2 x 1 = 2 2 x 2 = 4 2 x 3 = 6 2 x 4 = 8 2 x 5 = 10 2 x 6 = 12 2 x 7 = 14 2 x 8 = 16 2 x 9 = 18 2 x 10 = 20	2 x 1 = 2 2 x 2 = 4 2 x 3 = 6 2 x 4 = 8 2 x 5 = 10 2 x 6 = 12 2 x 7 = 14 2 x 8 = 16 2 x 9 = 18 2 x 10 = 20	✓

Passed all tests! ✓

Sample Input 2

3

3

Sample Output 2

5

Explanation 2

*2 + 3 = 5, i*s the best case for maximum nutrients.

Answer: (penalty regime: 0 %)

```
#include<stdio.h>
int main(){
    long long int n,t,i,nut = 0;
    scanf("%lld %lld",&n,&t);
    for(i=1;i<=n;i++){
        nut = nut+i;
        if(nut==t){
            nut =nut-1;
        }
    }
    printf("%lld",nut%100000000007);
}
```

Answer: (penalty regime: 0 %)

```c
#include<stdio.h>
long f(int n,int p){
    int factors[1000];
    int count = 0;
    for(int i=1;i<=n;i++){
        if(n%i==0){
            factors[count++]=i;
        }
    }
    if(p>count){
        return 0;
    }
    return factors[p-1];

}
int main(){
    int n,p;
    scanf("%d %d",&n,&p);
    printf("%ld\n",f(n,p));
    return 0;
}
```

	Input	Expected	Got	
✓	10 3	5	5	✓
✓	10 5	0	0	✓
✓	1 1	1	1	✓

Passed all tests! ✓