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Exp no:1

Program 1:

```
#include <stdio.h>
int count=0;
void function (int n)
{
    int i= 1;
    count++;
    int s =1;
    count++;
    while(s <= n)
    {
        count++;
        i++;
        count++;
        s += i;
        count++;
    }
    count++;
}
int main()
{
    int n;
    scanf("%d",&n);
    function(n);
    printf("%d",count);
}
```

Output:

	Input	Expected	Got	
✓	9	12	12	✓
✓	4	9	9	✓

Passed all tests! ✓

Program 2:

```
#include <stdio.h>
int count=0;
void func(int n)
{
    if(n==1)
    {
        printf("*");
    }
    else
    {
        for(int i=1; i<=n; i++)
        {
            for(int j=1; j<=n; j++)
            {
                count++;
                count++;
                count++;
                break;
            }
            count++;
            count++;
        }
        count++;
    }
    count++;
}
int main()
{
    int n;
    scanf("%d",&n);
    func(n);
    printf("%d",count);
}
```

Output:

	Input	Expected	Got	
✓	2	12	12	✓
✓	1000	5002	5002	✓
✓	143	717	717	✓

Passed all tests! ✓

Program 3:

```
#include <stdio.h>
int count=0;
void factor(int num)
{
    for (int i = 1; i <= num; ++i){
        count++;
        if (num % i== 0)
        {
            count++;
        }
        count++;
    }
    count++;
}
int main()
{
    int num;
    scanf("%d",&num);
    factor(num);
    printf("%d",count);
}
```

Output:

	Input	Expected	Got	
✓	12	31	31	✓
✓	25	54	54	✓
✓	4	12	12	✓

Passed all tests! ✓

Program 4:

```
#include <stdio.h>
int count=0;
void function(int n)
{
    int c=0;
    count++;
    for(int i=n/2; i<n; i++){
        count++;
        for(int j=1; j<n; j = 2 * j){
            count++;
            for(int k=1; k<n; k = k * 2){
                count++;
                count++;
                c++;
            }
            count++;
        }
        count++;
    }
    count++;
}
int main()
{
    int n;
    scanf("%d",&n);
    function(n);
    printf("%d",count);
}
```

Output:

	Input	Expected	Got	
✓	4	30	30	✓
✓	10	212	212	✓

Passed all tests! ✓

Program 5:

```
#include <stdio.h>
int count=0;
void reverse(int n)
{
    int rev = 0, remainder;
    count++;
    while (n != 0)
    {
        count++;
        remainder = n % 10;
        count++;
        rev = rev * 10 + remainder;
        count++;
        n/= 10;
        count++;
    }
    count++;
    count++;
}
int main()
{
    int n;
    scanf("%d",&n);
    reverse(n);
    printf("%d",count);
    return 0;
}
```

Output:

	Input	Expected	Got	
✓	12	11	11	✓
✓	1234	19	19	✓

Passed all tests! ✓