

Name:Nandana Pramod

Roll no: 241801180

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++;
```

```
}
```

```
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! ✓