&

1.

```
int sum = 0, n;                          C1: 1
cin >> n;                                C2: 1
for (int i = n; i > 0; i -= 1)           C3:(n+1)
      for(int j = 0; j < i; j++)         C4:(i+1), ∑_{i=0}^{n-1}(i+1)= 1+…+(n)= n(n+1)/2
            sum++;                       C5: i, ∑_{i=0}^{n-1}(i) = 0+1+…+(n-1)= n(n-1)/2
return sum;                              C6: 1
```

$T(n) = 1 + 1 + n+1 + \frac{n(n+1)}{2} + \frac{n(n-1)}{2} + 1 = n^2 + n + 4$

2.

```
float an(n) {
      float s = 1;                       C1: 1
      for (int i = 0; i < n; i++) {      C2: n+1
            float a = 1;                 C3: n
            for (int j = 0; j <= i; j++) {   C4: i+2, ∑_{i=0}^{n}(i+2) = 2 +…+(n+2)+(1-1)
                                             = n(n+3)/2 - 1
            a = a * 2*(j+1)/(2*j+5);     C5: i+1, ∑_{i=0}^{n}(i+1) = 1+…+(n+1) = n(n+2)/2
                  s += a;                C6: i+1, ∑_{i=0}^{n}(i+1) = 1+…+(n+1) = n(n+2)/2
            }
      }
      return s;                          C7: 1
}
```

$T(n) = 1 + n+1 + n + \frac{n(n+3)}{2} - 1 + \frac{n(n+2)}{2} * 2 + 1 = 2n + 2 + \frac{2n(n+5)}{2} = n^2 + 7n + 2$