Now, if $f''(x_r)$ is the largest for all $r = 1, 2 \ldots n-1$, then

$$E_t = -\frac{nh^3}{12} f''(x_r) = -\frac{b-a}{12} h^2 f''(x_r)$$

It shows that composite trapezoidal rule's error is of order h^2.
The degree of precession of trapezoidal rule is 1.

Algorithm 4.1: Algorithm for Composite Trapezoidal Rule

```
1. Define f(x)
2. Enter the values of upper and lower limit a,b
3. Enter the number of steps,N
4. Ns=1
5. h=(a-b)/N
6. sum=0
7. do
   {
         sum=sum + h/2 x((f(a)+f(a+h)));
      a=a+Ns*h;
   }while(a<b);
8. print Sum
9. Stop
```