```
In[43]:=  Trapezoidal[a0_, b0_] :=
           Module[{},
             a = a0;
             b = b0;
             h = (b - a);
             TI = (h / 2) * (f[a] + f[b]);
             Print["Integration by Trapezoidal Rule is : ", N[TI]];
             DI = Integrate[f[x], {x, a, b}];
             Print["Integration by Direct : ", N[DI]];
             Print["Error : ", N[TI - DI]];
            ];
          f[x_] := 1 / (1 + x^2);
          Trapezoidal[0, 5];

          Integration by Trapezoidal Rule is : 2.59615

          Integration by Direct : 1.3734

          Error : 1.22275

In[46]:=  f[x_] := 1 / (1 + x);
          Trapezoidal[0, 1];

          Integration by Trapezoidal Rule is : 0.75

          Integration by Direct : 0.693147

          Error : 0.0568528

In[48]:=  f[x_] := 2^x;
          Trapezoidal[0, 4];

          Integration by Trapezoidal Rule is : 34.

          Integration by Direct : 21.6404

          Error : 12.3596
```