In[12]:=
```
SimpsonR[a0_, b0_, m_, f_] :=
Module[{a = a0, b = b0, h, ApproxIntegral , n},
If[Mod[m, 2] ≠ 0, Print["m should be even positive Integer "];
    Return[];];
h = (b – a) / m;
n = m / 2;
ApproxIntegral = ((h * (f[a] + f[b])) / 3) +
     ((2 * h * (Sum[f[a + 2 * h * k], {k, n – 1}])) / 3) + ((4 * h (Sum[f[a + (2 * k – 1) h], {k, n}])) / 3);
Return[ApproxIntegral ];];
```

In[15]:=
```
f[x_] := 1 / (1 + x);
Print["f(x)= ", f[x]];
N[SimpsonR[0, 1, 2, f]]
```

$$f(x)= \frac{1}{1+x}$$

Out[17]= 0.694444

In[18]:=
```
N[SimpsonR[0, 1, 4, f]]
```

Out[18]= 0.693254

In[19]:=
```
N[SimpsonR[0, 1, 8, f]]
```

Out[19]= 0.693155

In[20]:=
```
N[SimpsonR[0, 1, 16, f]]
```

Out[20]= 0.693148

In[21]:=
```
ActualValue = Integrate[1 / (1 + x), {x, 0, 1}];
N[ActualValue ]
```

Out[22]= 0.693147