

Algorithm: Simpson's 1/3rd Rule

- Read function f , lower limit a , upper limit b , number of sub-intervals n
 - Set $h = \frac{b - a}{n}$
 - $sum = f(a) + f(b)$
 - For $i = 1$ to $(n-1)$ in steps of 1 do
 - If $(i \% 2 == 0)$ then
 - $sum += 2 * f(a + i * h)$
 - Else
 - $sum += 4 * f(a + i * h)$
 - End ifEnd for
 - $Integral = \frac{sum * h}{3}$
 - Print integral
- END