Algorithm: Gaussian Quadrature Formula Method

- Read function f, lower limit a, upper limit b, number of points n

- $Initialize\ Values\ dictionary(key - value\ pair)of\ w1, w2, w3, \ldots\ldots wn\ and\ x1, x2, x3, \ldots\ldots xn\ with\ its\ predefined\ values$

- Set p $= \dfrac{a+b}{2}$

- Set q = (b-a)/2

- Set integral = 0.0

- For i = 0 to n in steps of 1 do
  - $F = f(p + q * values[n][i])$
  - $integral\ += (Values[n][i]) * F$

  End for

- Integral = $q * integral$

- Print integral

  END