```
Input: vector x, vector y, x_inter (value to interpolate)
Output: (float) y interpolated, Q: Coefficients matrix

begin Neville
    if x or y has duplicates:
        return error
    end if

    if lenght of x is not equals to lenght of y:
        return error
    end if

    set n = lenght of x
    set Q = Matrix[n][n-1] filled with zeros
    set Q = Q with y vector concatenated as the last column
    For i = 1,..., n
        For j = 1,..., i + 1
            set Q[i,j] = ((x_inter-x[i-j])*Q[i,j-1]-(x_inter-x[i])*
                                Q[i-1,j-1])/(x[i]-x[i-j])
        end For
    end For
    y_int = Q[n-1,n-1]
    return y_int,Q
end Neville
```