These values are contants

$$q_c := 10MPa$$

$$\sigma'_{v\_bottom\_cptu} := 200kPa$$

$$FC := 50$$

These are the available equations

$$q_{c1Ncs} := q_{c1N} + \Delta q_{c1N}$$

$$m_{parameter} := 1.338 - 0.249 \cdot \left(q_{c1Ncs}\right)^{0.264}$$

$$C_N := \begin{cases} \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}}\right)^{m_{parameter}} & \text{if } \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}}\right)^{m_{parameter}} \leq 1.7 \\ 1.7 & \text{if } \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}}\right)^{m_{parameter}} > 1.7 \end{cases}$$

$$\Delta q_{c1N} := \left(11.9 + \frac{q_{c1N}}{14.6}\right) \cdot e^{\left[1.63 - \frac{9.7}{FC+2} - \left(\frac{15.7}{FC+2}\right)^2\right]}$$

$$q_{c1N} := C_N \cdot \frac{q_c}{100kPa}$$

This variable is the one which should be solved q_{c1Ncs}

This is my attemp of solving the needed variable, but clearly it doesn't work.

$$q_{c1Ncs} := \left| \begin{array}{l} q_{c1Ncs} \leftarrow q_{c1N} + \Delta q_{c1N} \\ m_{parameter} \leftarrow 1.338 - 0.249 \cdot (q_{c1Ncs})^{0.264} \\ C_N \leftarrow \left| \begin{array}{ll} \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}} \right)^{m_{parameter}} & \text{if } \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}} \right)^{m_{parameter}} \le 1.7 \\ 1.7 \text{ if } \left(\frac{100kPa}{\sigma'_{v\_bottom\_cptu}} \right)^{m_{parameter}} > 1.7 & \end{array} \right. \\ \Delta q_{c1N} \leftarrow \left(11.9 + \frac{q_{c1N}}{14.6} \right) \cdot e^{\left[1.63 - \frac{9.7}{FC+2} - \left(\frac{15.7}{FC+2} \right)^2 \right]} \\ q_{c1N} \leftarrow C_N \cdot \frac{q_c}{100kPa} \end{array} \right.$$

$$q_{c1Ncs} := \blacksquare$$