CFL Coursework 2

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Question 1: See code from line 218.

Question 2:

mkeps([c_1,c_2,...,c_n]) = No definition required as RANGE(…) would never match the empty string.

mkeps(r^+) = Stars([mkeps(r)]) (There must be at least one occurrence of r in the list)

mkeps($r^?$) = Empty

mkeps($r^{(n)}$) = if (n == 0) Stars([]) else Stars([mkeps(r)$_1$, … , mkeps(r)$_n$])

inj([c_1,c_2,...,c_n]) *c Empty* = Char(c)

inj(r^+) *c* Sequ(v1, Stars(vs)) = Stars(inj(r, c, v1)::vs)

inj($r^?$) *c* Right(v) = Right(inj(r, c, v))

inj($r^{(n)}$) *c* Sequ(v1, Stars(vs)) = Stars(inj(r, c, v1)::vs)

See code from line 255 for tests.

Question 3:

See code from line 258 for tests.