

Pretvaranje iz dekadnog u oktalni brojni sistem najlakše je izvesti uz pomoć Hornerove sheme:

$$\begin{array}{r|l}
 & : 8 \\
 127 & 7 \\
 15 & 7 \\
 1 & 1 \\
 0 & 
 \end{array}
 \begin{array}{c}
 \uparrow \\
 \uparrow \\
 \uparrow
 \end{array}
 \quad \text{Dakle, } (127)_{10} = (177)_8$$

$$\begin{array}{r|l}
 & : 8 \\
 798 & 6 \\
 99 & 3 \\
 12 & 4 \\
 1 & 1 \\
 0 & 
 \end{array}
 \begin{array}{c}
 \uparrow \\
 \uparrow \\
 \uparrow
 \end{array}
 \quad \text{Dakle, } (798)_{10} = (1436)_8$$

$$\begin{array}{r|l}
 & : 8 \\
 1000 & 0 \\
 125 & 5 \\
 15 & 7 \\
 1 & 1 \\
 0 & 
 \end{array}
 \begin{array}{c}
 \uparrow \\
 \uparrow \\
 \uparrow
 \end{array}
 \quad \text{Dakle, } (1000)_{10} = (1750)_8$$

$$\begin{array}{r|l}
 & : 8 \\
 10000 & 0 \\
 1250 & 2 \\
 156 & 4 \\
 19 & 3 \\
 2 & 2 \\
 0 & 
 \end{array}
 \begin{array}{c}
 \uparrow \\
 \uparrow \\
 \uparrow
 \end{array}
 \quad \text{Dakle, } (10000)_{10} = (23420)_8$$

S druge strane, pretvaranje iz oktalnog u dekadni brojni sistem lako se izvodi direktno po definiciji:

$$(101)_8 = 1 \cdot 8^2 + 0 \cdot 8^1 + 1 \cdot 8^0 = 1 \cdot 64 + 0 \cdot 8 + 1 \cdot 1 = 64 + 0 + 1 = (65)_{10}$$

$$(757)_8 = 7 \cdot 8^2 + 5 \cdot 8^1 + 7 \cdot 8^0 = 7 \cdot 64 + 5 \cdot 8 + 7 \cdot 1 = 448 + 40 + 7 = (495)_{10}$$

$$(1000)_8 = 1 \cdot 8^3 + 0 \cdot 8^2 + 0 \cdot 8^1 + 0 \cdot 8^0 = 1 \cdot 512 + 0 \cdot 64 + 0 \cdot 8 + 0 \cdot 1 = 512 + 0 + 0 + 0 = (512)_{10}$$

$$(4077)_8 = 4 \cdot 8^3 + 0 \cdot 8^2 + 7 \cdot 8^1 + 7 \cdot 8^0 = 4 \cdot 512 + 0 \cdot 64 + 7 \cdot 8 + 7 \cdot 1 = 2048 + 0 + 56 + 7 = (2111)_{10}$$

$$\begin{aligned}
 (77777)_8 &= 7 \cdot 8^4 + 7 \cdot 8^3 + 7 \cdot 8^2 + 7 \cdot 8^1 + 7 \cdot 8^0 = 7 \cdot 4096 + 7 \cdot 512 + 7 \cdot 64 + 7 \cdot 8 + 7 \cdot 1 = \\
 &= 28672 + 3584 + 448 + 56 + 7 = (32767)_{10}
 \end{aligned}$$