Zadatak 3. Zapiši dekadske brojeve 6, 13, 25, 125 u sustavima s bazom 2, 8 i 16.

Rješenje. Brojeve najprije prebacujemo u binarni sustav (vidi primjer 1.5), a zatim iz binarnog lako konvertiramo u oktalni i heksadekadski. Pogledaj u udžbeniku vezu između binarne, oktalne i heksadekadske baze (str 4).

1)

$$
\begin{array}{c|c|c|}
6 & 3 & 1 \\
\hline
0 & 1 & 1 \\
\end{array}
$$

$$6 = 110_{(2)} = 6_{(8)} = 6_{(16)}.$$

2)

$$
\begin{array}{c|c|c|c|}
13 & 6 & 3 & 1 \\
\hline
1 & 0 & 1 & 1 \\
\end{array}
\qquad 13 = 1101_{(2)}
$$

$$
\begin{array}{c|c|}
13 & 1 \\
\hline
5 & 1 \\
\end{array}
\qquad 13 = 15_{(8)}
$$

$$13 = D_{(16)}.$$

3)

$$
\begin{array}{c|c|c|c|c|}
25 & 12 & 6 & 3 & 1 \\
\hline
1 & 0 & 0 & 1 & 1 \\
\end{array}
\qquad 25 = 11001_{(2)}
$$

$$
\begin{array}{c|c|}
25 & 3 \\
\hline
1 & 3 \\
\end{array}
\qquad 25 = 31_{(8)}
$$

$$
\begin{array}{c|c|}
25 & 1 \\
\hline
9 & 1 \\
\end{array}
\qquad 25 = 19_{(16)}
$$

4)

$$
\begin{array}{c|c|c|c|c|c|c|}
125 & 62 & 31 & 15 & 7 & 3 & 1 \\
\hline
1 & 0 & 1 & 1 & 1 & 1 & 1 \\
\end{array}
\qquad 125 = 1111101_{(2)}
$$

$$
\begin{array}{c|c|c|}
125 & 15 & 1 \\
\hline
5 & 7 & 1 \\
\end{array}
\qquad 125 = 175_{(8)}
$$

$$
\begin{array}{c|c|}
125 & 7 \\
\hline
13 & 7 \\
\end{array}
\qquad 125 = 7D_{(16)}
$$