

Zadatak 8. Brojeve 223, 517, 12053 zadane u oktalnom sustavu prebaci u heksadekadski sustav.

Rješenje. Jednoj znamenki oktalnog sustava odgovaraju tri znamenke binarnog sustava, a zatim četirima znamenkama binarnog jedna znamenka heksadekadskog sustava:

$$223_{(8)} = 10010011_{(2)} = 10010011_{(2)} = 93_{(16)};$$

$$517_{(8)} = 101001111_{(2)} = 101001111_{(2)} = 14F_{(16)};$$

$$12053_{(8)} = 1010000101011_{(2)} = 1010000101011_{(2)} = 142B_{(16)};$$

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$$223_{(8)} = 2 \cdot 8^2 + 2 \cdot 8 + 3 = 147,$$

$$517_{(8)} = 5 \cdot 8^2 + 1 \cdot 8 + 7 = 335,$$

$$12053_{(8)} = 1 \cdot 8^4 + 2 \cdot 8^3 + 0 \cdot 8^2 + 5 \cdot 8 + 3 = 5163.$$

$$147 = 9 \cdot 16 + 3$$

$$9 = 0 \cdot 16 + 9$$

$$\hline 223_{(8)} = 93_{(16)}$$

$$335 = 20 \cdot 16 + 5$$

$$20 = 1 \cdot 16 + 4$$

$$1 = 0 \cdot 16 + 1$$

$$\hline 517_{(8)} = 14F_{(16)}$$

$$5163 = 322 \cdot 16 + 11$$

$$322 = 20 \cdot 16 + 2$$

$$20 = 1 \cdot 16 + 4$$

$$1 = 0 \cdot 16 + 1$$

$$\hline 12053_{(8)} = 142B_{(16)}$$