Exercises.

Problem set 8.

Let $F = \mathbb{F}_{17}$, $\beta = 3$. Consider the normalized RS(17,9)-code with these data and the error correction algorithm based on EA.

Task 8.1. Given $s(X) = X^7 + X^6 + X^5 + 5X^4 - 2X^3 + 5X^2 - 3X + 7$. Use the algorithm and calculate the error vector.

Task 7.2. Given $s(X) = X^7 + 5X^6 + 8X^5 + 6X^4 - X^3 + 5X^2 - 3X + 8$. Use the algorithm and calculate the error vector.

Literature: Chapter 13 in "Foundation of coding" by J.Adamek.

Remark. Notice that in our lectures we introduced a minus sign in the formula (13.2.2), p.262, and thus there will be no $(-1)^k$ in (13.2.3), and also no $(-1)^{k+1}$ in (13.3.3), p.263.

Remark. For the Step III of the algorithm it is better to use the formula (13.1.6), p.258, than the description on p.263.