Abstract: Steganography is a science which is interested in communication hiding. This work is focused on the most recent methods related to this topic. Mainly, it is matrix embedding, which uses coding theory, and sum and difference covering sets (SDCS). Rainbow coloring of grid graphs is used to receive even better results. This technique decrease amplitude of performed changes. It makes stegosystems less likely to be detected. Properties which describe behavior of each stegosystem are included for each technique.