Abstract: Wherever information is transmitted we can find error-correcting codes. LDPC (low density parity check) codes are one of frequently used classes of codes and expander codes are promising members of this class. In this work, we explain what expander code are. We also show that expander codes simultaneously have both asymptotically optimal parameters and linear-time encoding and decoding. Unfortunately, our constructions grant us codes, which are too big for regular use, for example for packet transmission. However, we believe that with better construction of expander graphs we will be able to construct short codes with significant practical applications.