Peano curves are continuous mappings from the unit interval [0, 1] onto the n-dimensional square $[0, 1]^n$, $n \in \mathbb{N}$. There are many such curves and therefore we focuses especially on the Hilbert curve. We informally outline its geometrical interpretation and then we describe the construction in \mathbb{R}^2 by writing a number in a quaternary form. For such defined mapping we prove that it is a Peano curve and that it is 1/2 - Hölder continuous. In conclusion, using the Haussdorf dimension, we show that there is no Peano curve in \mathbb{R}^n that is also α - Hölder continuous for $\alpha > 1/n$.