In presented work we will discuss the central limit theorem for dependent random variables. First of all, we brush up the basic version of the theorem and we illustrate it by an example of its use. Then we introduce a definition of the strong mixing condition that allows us to prove the theorem even for dependent random variables. Next, we focus on the assumptions which are essential for the validity of the theorem. The biggest part of the work we deal with its proof. Last of all, we illustrate this theorem with an example which helps us to better understand the main idea of the proof. We simulate this example for specific value of sequences that we define in the wording of the theorem.