What is computing?

In a way everyone would have an answer for our title question. Most people know computation has something to do with sequences of zeros and ones which encode information. Some people would know that information contained in this form inside a computer is manipulated, i.e. moved around and transformed in order to obtain desired effect, e.g. an answer to a specific query. Such manipulation is made possible by what is known as code, i.e. special type of information that tells the computer what to do with the rest of information (data) it holds in its memory.

To clarify this commonly known picture even further, let us use an analogy, and let us have fun doing it. Imagine the task of tiling the plane having an infinite supply of tiles of just a few types. The tiles are patterned in a very simple way so that each edge has its own color: red, green, blue, yellow, or grey. Say, we have 13 different tile patterns. The task at hand is to tile a square court in such way that neighboring tiles have matching edge colors.