Chapter-11

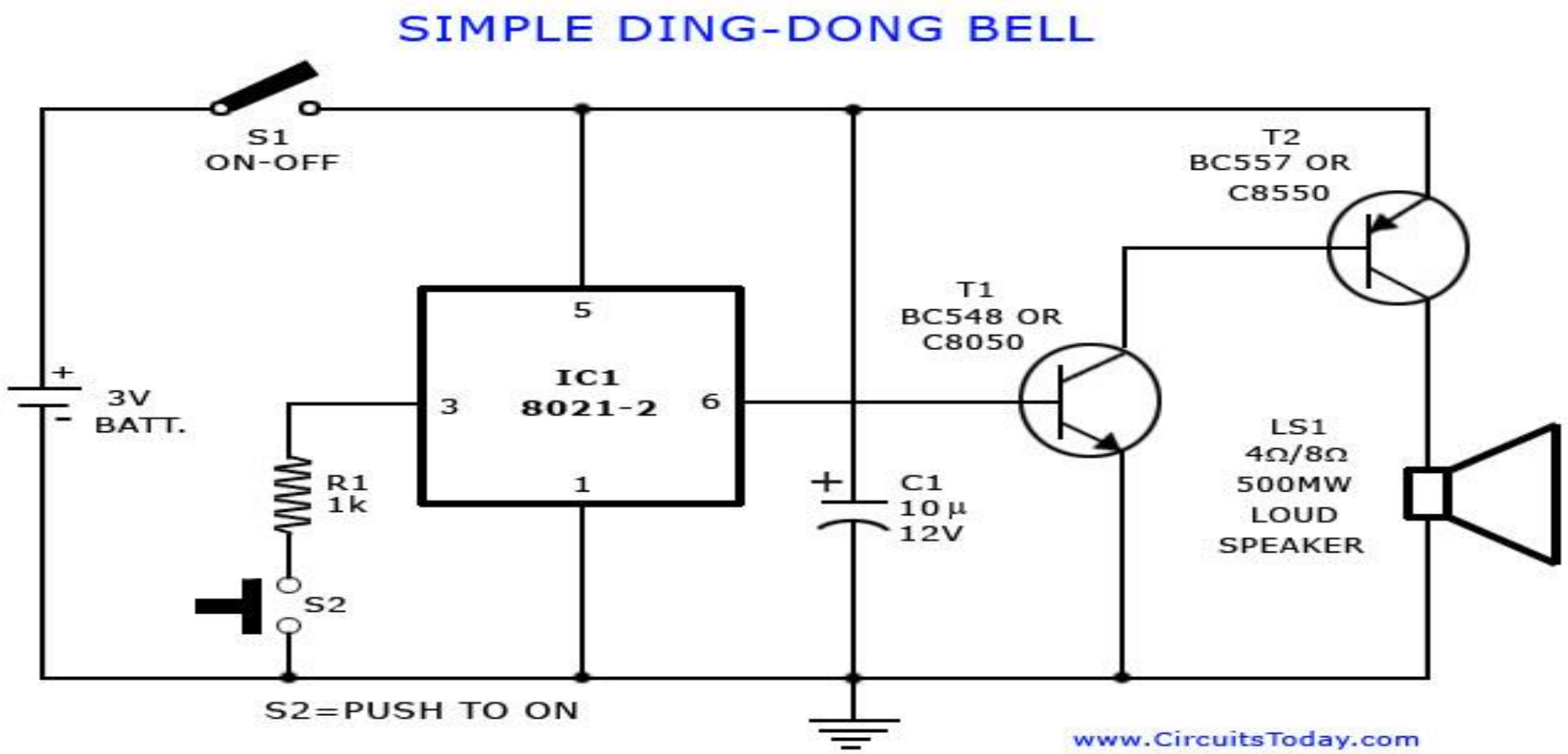
(Understand the concepts of different type of Electrical circuit)

Lecture-1

The concepts of different type of Electrical circuit?

- **An electric circuit is a closed path in which electrons move to produce electric currents. Indeed, all the simple modern marvels are a consequence of this scientific principle. Read on to understand more on the components, types, and other concepts related to electric circuits.**

- **Simple Calling Bell Circuit:**



- Working Procedure:
- A simple “tone generator” is a cool circuit that everyone must build in their electronics learning process. We’ve designed this tone generator circuit using 8021 IC, two transistors (BC548 or C8050), a small speaker and some associated components. As you see, components are minimal and you don’t need to spend more than a small amount to buy all the required parts for this project.

- **Let’s Build our Simple Tone Generator;**
- Here we present a simple and low-cost tone generator circuit, a ding dong bell suitable for calling bell purposes. It is made around IC 8021. It is an 8 pin IC but only four pins are shown here. 8021 has an in-built circuitry to produce ding dong sound each time its pin 3 is pulled low. The sound is stored in a 4 bit ROM. A complementary-pair, a two-transistor amplifier is used to amplify the sound to a fair level of audibility. A piezoelectric tweeter or an 8-ohm, 500mW speaker can be used at the output.

- Each time when switch S2 is pressed, ding dong sound is produced twice. If you try to press switch S2 a second time when the first ding dong sound is still being produced, it has no effect whatever and the two ding-dong bell sounds will be invariably produced.S1 is the ON-OFF switch. Assemble the circuit on a good quality all-purpose PCB.Don’t forget to use an IC holder for IC 8021.