Computer Architecture

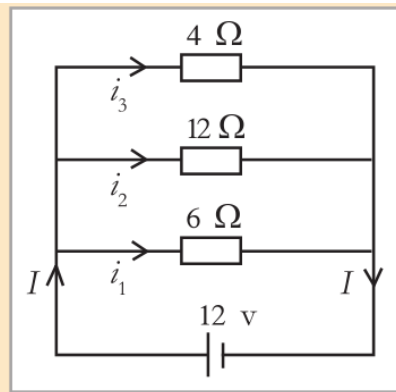## Tutorial - 07

Answer all questions.

01.

Three resistors 4 Ω, 12 Ω and 6 Ω are connected to a supply of 12 V as shown below.

I.   Calculate the total resistance of these three resistors.
II. What current is gained from the electric supply?
III. Calculate the current flowing through 6 Ω.
IV. What is the current flowing through 12 Ω?
V.   What is the current flowing through 4 Ω?

02.

Three bulls B_1, B_2 and B_3 are connected to 12 V, supply as shown in the following diagram.

I.   Calculate the total resistance of the two bulls B_2 and B_3 (between Y and Z).
II.   What is the total resistance between the two points X and Z.
III. What is the current gained from the electric supply.
IV.   Calculate the potential difference between X and Y.
V.   Calculate the potential difference between Y and Z.
VI.   Calculate the current flowing through B_2 bulb.
VII. Calculate the current through the bulb B_3.
VIII. If the bulb B_3 is removed, then what would be the current gain from the electric supply.