

Ning Chen on Self-learning skills:

If you can ask right questions, more than half of the learning is done.

CPSC 440 Project questions that are related to UART:

Q. What is UART?

A. Universal Asynchronous Receiver and Transmitter.

Q. Which term is the most difficult term out of the form terms (Universal, Asynchronous, Receiver, and Transmitter)?

A. The term Asynchronous is the most difficult one.

Q. Can you explain the term “Asynchronous”?

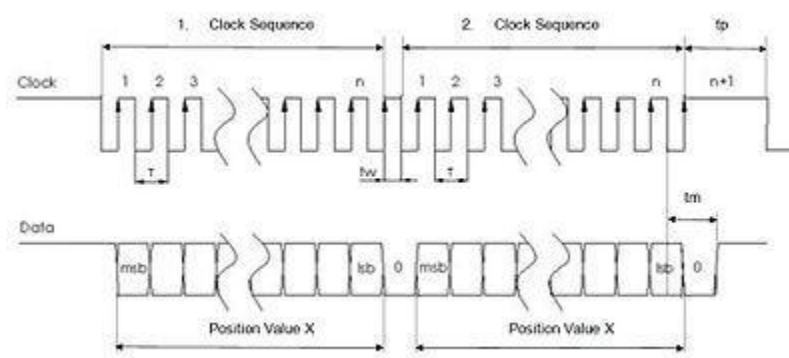
A. A bit hard here.

Q. Any strategy?

A. Well, we can explain the term “Synchronous” first, probably this is easier.

Q. What do you mean “Synchronous Communication”?

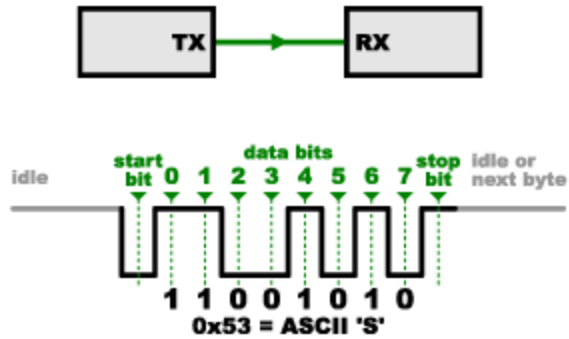
A. Data transfer method in which a continuous stream of data signals is accompanied by timing signals (generated by an electronic clock) to ensure that the transmitter and the receiver are in step (synchronized) with one another.



From <http://www.businessdictionary.com/definition/synchronous-transmission.html>

Q. Okay, I now understand the “Synchronous Communication.” How about “Asynchronous Communication”?

A. A picture is worth of a thousand words. Try to observe the picture below:



Q. I still don't get it. Can you help?

A. Try to observe things first. Now, look at the two given pictures (Synchronous and Asynchronous). What are the major difference? (write you own observation using your own words.)

Q. I can see the difference. Nevertheless, I am not sure why the asynchronous communication works. I mean, there is only one line between the transmitter and the receiver. Is one line connection sufficient?

A. (write your own insights here.)