

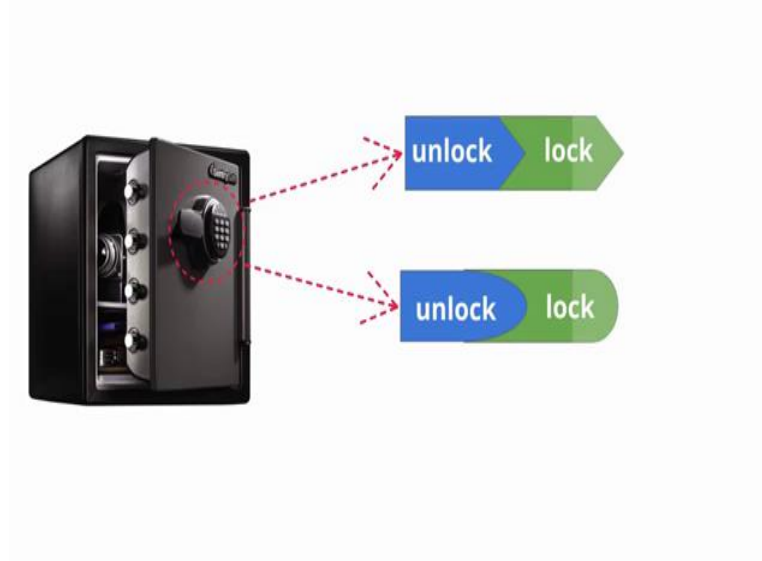
**‘Demystifying Networking
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**Lecture - 70
The secret box**

Spy movies often make one feel like becoming a spy; however, there are many different challenges that a spy has to deal with on a daily basis. In this video, we will talk about one of the most important aspects in a secret agent’s work. Communication, even on a secret mission a spy has to stay in contact and continuously update the team, but without being noticed.

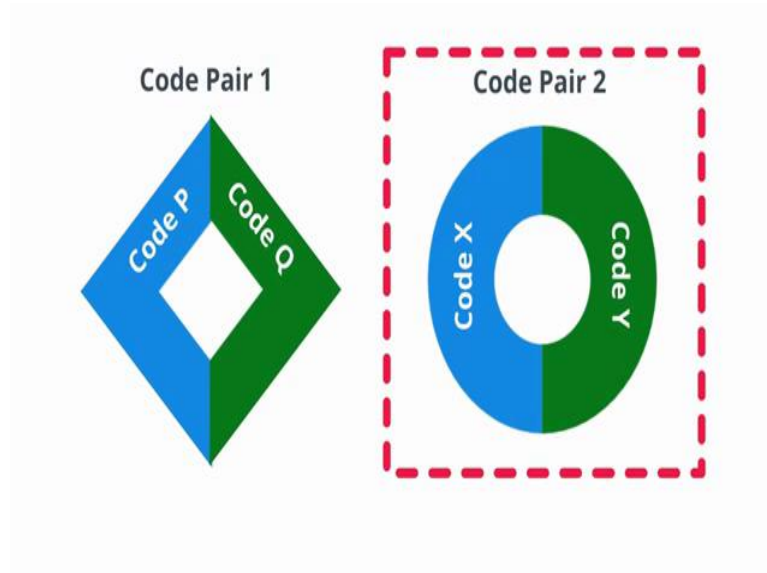
Meet Aditi and Balraj they are on a secret mission and they need to frequently exchanging messages and artifacts among them, but very cautiously. If someone is able to decode the messages their cover would be blown. To avoid being noticed they have to rely on public means of transporting the messages and goods. They usually exchange this information using a box which opens and closes to the 16-digit combination; a new key is set for every exchange. However, they cannot communicate directly except for a few rare instances, to avoid falling under suspicion. As a workaround they took the help of an anonymous friend who built them a special box; however, he had to escape and could not explain how to use it.

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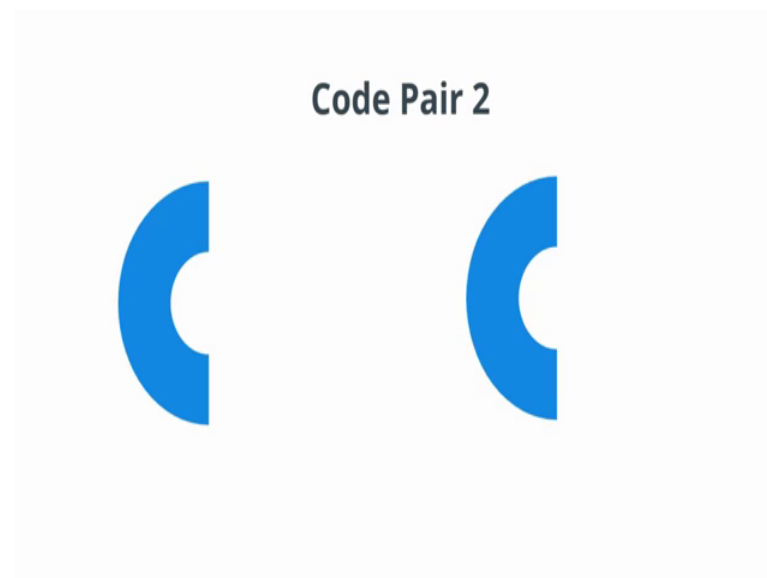
The box has a special lock; the lock has two pairs of code. If locked with either code of any of the pairs, it can only be opened by the other code of the same pair.

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That is if the lock is locked using the first code of the second pair.

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It can only be opened using the second code of the second pair. They need to figure out a way of exchanging messages amongst themselves using this new box.

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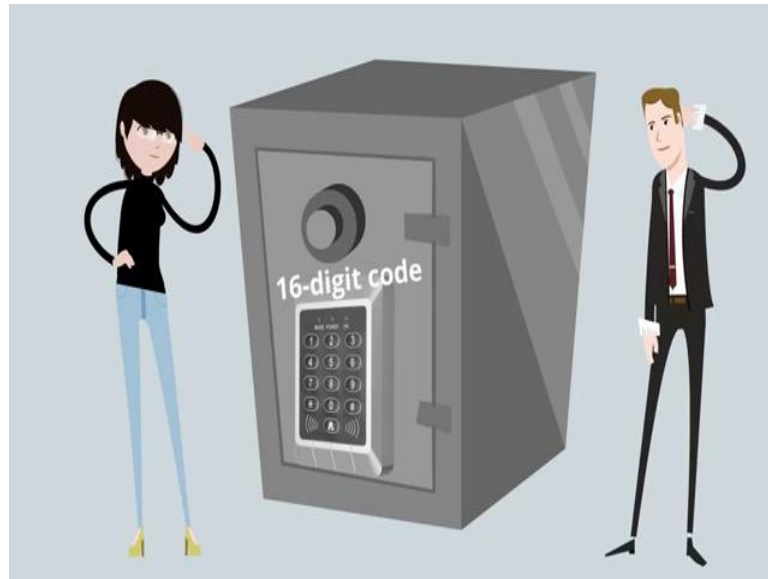
The other challenge is that they have some big materials to be exchanged.

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But which might not fit in the new box, but could fit in the old 16-digit lock.

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So, that is the situation; now it is time for some questions.