1: Streaming videos can be classified in three categorizes:

* UDP streaming
* HTTP streaming
* Adaptive HTTP streaming

UDP streaming, the server transmits video at a rate that matches the client’s video consumption rate by clocking out the video chunks over UDP at a very steady rate.

The HTTP streaming, the video is simply stored in a GTTP server as an ordinary file with a specific URL. When a user wants to see the video, the client establishes a TCP connection with the server and issues a HTTP GET request for that URL.

Adaptive HTTP streaming, content is segmented into small objects called chunks encoded at multiple bitrates. The client accesses the content by requesting one after the other the chunks that best fit the terminal and network conditions.

2: List three disadvantages of UDP streaming.

* First, due to the unpredictable and varying amount of available bandwidth between servers and client.
* UDP streaming is that it requires a media control server, such as RSTP server, to process client to server interactivity requests and to track client state.
* Many firewalls are configured to clock traffic, preventing the users behind theses fire walls from receiving UDP video.

3: A packet that arrives after it scheduled playout time can not be played out due to the real-time constraint of the applications. Therefore, from application’s perspective, the packet has been lost.

4: RTP streams have different multicast addresses; RTP streams in the same session: SSRC field; RTP packets are distinguished from RTCP packets by using distinct port numbers.

5: Every SIP user has an associated registrar. Whenever a user launches an SIP application on a device, the application sends an SIP register a message to the registrar, informing the registrar of its current IP address. SIP registrar keeps track of the new IP addresses of new or current in touch devices as it’s difference with home agent.