### 1. Introduction to UTF-8 and Unicode —

Video not available

# 2. URL encoding —

q=better+flight+search

### 3. HTML encoding —

HTML encoding is the process of replacing ASCII characters with their HTML entity equivalence. This is done to avoid security vulnerabilities, such as cross-site scripting (XSS) attacks.

HTML encoding is necessary to prevent XSS attacks. XSS attacks occur when a malicious user injects JavaScript code into a web page. This code can then be executed by the user's browser, which can give the attacker control of the user's computer.

# 4. Base64 encoding —

It is a way to send any form of data into a long string of text over the web. Base64 is a way of encoding binary data into ASCII text. This is useful for sending binary data over channels that only support text, such as email. Base64 works by taking three bytes of binary data and converting them into four characters of ASCII text. The four characters are chosen from a special alphabet that consists of uppercase and lowercase letters, numbers, and the plus and minus signs.

- It is a very simple and efficient encoding scheme.
- It is widely supported by a variety of software and hardware.
- It is very secure and can be used to protect sensitive data.

### 5. Hex encoding & ASCII —

The video is not available :(