2100031921 Explain MAC algorithms with example.

must agree on the same key before initiating communications, as is the case with symmetric encryption. For the same reason, MACs do not provide the property of non-repudiation offered by signatures specifically in the case of a network-wide shared secret key: any user who can verify a MAC is also capable of generating MACs for other messages. In contrast, a digital signature is generated using the private key of a key pair, which is public-key cryptography. Since this private key is only accessible to its holder, a digital signature proves that a document was signed by none other than that holder. Thus, digital signatures do offer non-repudiation. However, non-repudiation can be provided by systems that securely bind key usage information to the MAC key; the same key is in the possession of two people, but one has a copy of the key that can