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/*

So, we're going to use Promises
-- What value are we promising?
    -- Some things return plaintext, some ciphertext, some keys
-- What are plaintext and ciphertext?
    -- Plaintext = ABV, or possibly DOMString for convenience
    -- Ciphertext = ABV output + parameters (kind of like JOSE)
    -- Keys are more or less what they are in the current spec

Example:

window.crypto.encrypt("attack at dawn!", {
  alg: { name: "AES-GCM", "iv": /* random */ },
  key: /* key */
}).then( postEncryptedText, alertOnFailure );

*/

typedef ArrayBufferView Plaintext
interface Ciphertext {
      Algorithm alg;
      Key? key; // Absent for digest()
      ArrayBufferView data;
      ArrayBufferView? sig; // Present only for sign() or AEAD with separate
tag
}
interface Key { /* TODO */ }

interface PlaintextPromise : Promise {} // Returns a Plaintext
interface CiphertextPromise : Promise {} // Returns a Ciphertext
interface KeyPromise : Promise {} // Returns a Key on success

interface EncryptOptions { alg, key, ... }
interface SignOptions { alg, key, ... }
interface DigestOptions { alg }

interface Crypto {
    CiphertextPromise   encrypt(pt, opt)   // P -> C
    PlaintextPromise    decrypt(ct, opt)   // C -> P
    CiphertextPromise   sign(pt, opt)      // P -> C
    PlaintextPromise    verify(ct, opt)    // C -> P
    CiphertextPromise   digest(pt, opt)    // P -> C

    KeyPromise generateKey();       // () -> Key
    KeyPromise agreeOnKey();        // Key + JWK -> Key
    KeyPromise deriveKey();         // Key || ABV || string -> Key
    KeyPromise importKey();         // Ciphertext -> Key
```

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    CiphertextPromise exportKey();  // Key -> Ciphertext
}
```