Promise API's

1. Promise.all()

* Used to handle multiple Promises together.
* Takes an array of Promises, as Input.

Promise.all([P1, P2, P3])

3sec ✓ | 1sec ✓ | 2sec ✓ → (✓) resolved

after 3sec we will get this → [val1, val2, val3]

★ why 3sec? → Waits for all to finish.

But what if one of the Promise Fails? ?

promise.all([P1, P2, P3])

3sec ✓ | 1sec ✗ | 2sec ✓ → (✗) Rejected

★ after 1sec we will get an error.

Ek bhi agar Reject hua to error fekega and Promise.all → bhi reject hoga.

2. Promise.allSettled()

promise.all([P1, P2, P3])

3sec ✓ | 1sec ✓ | 2sec ✓

★ after 3sec we will get this → [val1, val2, val3]

But what if one of them gets Fails? ?

promise.allSettled([P1, P2, P3])

3sec ✓ | 1sec ✗ | 2sec ✓

★ after 3sec we will get this → [val1, err2, val3]

3. Promise.race()

promise.race([P1, P2, P3])

3sec ✓ | 1sec ✓ | 2sec ✓

★ after 1sec we will get the value of P2 → (val2)

* (val2)
* (val3) → (after 2sec)
* (val1) → (after 3sec)

What if one of them Fails? ?

promise.race([P1, P2, P3])

3sec ✓ | 1sec ✗ | 2sec ✓

★ after 1sec we will get an Error → ERROR (From P2)

→ return result of first settled Promise.

4. Promise.any()

promise.any([P1, P2, P3])

3sec ✓ | 1sec ✓ | 2sec ✓

★ after 1sec we will get this → (val2)

What if one of them Fails? ?

promise.any([P1, P2, P3])

3sec ✓ | 1sec ✗ | 2sec ✓

★ after 2sec we will get this → (val3)

→ Wait for 1st success.

But → What if everything Fails? ?

→ we will get an aggregate errors. (Array of errors.) ★