## **4promise.html**

```
<!DOCTYPE html>
1
 2
    <html lang="en">
 3
4
   <head>
5
        <meta charset="UTF-8">
        <meta name="viewport" content="width=device-width, initial-scale=1.0">
6
7
        <title>Document</title>
8
    </head>
9
10
    <body>
11
12
        <script>
13
            //technical suneja
14
            //async js programming
15
            //callback promise async and awaits
16
17
            ////explanation this program jiski timing kar rahte hai wo hi pahle chalata hai sirf set time
    out ke sath
18
            // const datas=[
19
            //
                   {
20
            //
                       name:"Ajay", Profession:"software doveloper"
            //
21
                   },
            //
22
                   {
23
            //
                       name: "anuj", Profession: "software doveloper"
            //
                   }
24
            // 1
25
26
            // function getDatas(){
27
            //
                   setTimeout(()=>{
            //
                       let output=" "
28
29
            //
                     datas.forEach((data,index)=>{
30
            // output+= `${data.name}`
            //
31
                     })
32
            //
                     document.body.innerHTML=output;;;;;;;;
33
            //
                   },3000)
34
            //
               }
35
36
            //
                const createData=(newdata)=>{
37
            //
                   setTimeout(()=>{
            //
                       datas.push(newdata)
38
            //
39
                   },2000)
40
            // }
41
42
            // getDatas()
43
            // createData({name:"shubh",Profession:"web doveloper"})
44
45
46
            //explanation this program jiski timing kar rahte hai wo hi pahle chalata hai sirf set time out
    ke sath
47
48
49
50
51
52
            //calback
53
            // const datas=[
```

```
{
 54
             //
 55
             //
                         name:"Ajay", Profession:"software doveloper"
             //
                     },
 56
 57
             //
                     {
             //
                         name:"anuj", Profession:"software doveloper"
 58
 59
             //
                     }
             // ]
 60
 61
 62
             // function getData(){
                 setTimeout(()=>{
 63
 64
             //
                     output="";
             //
 65
                     datas.forEach((data,index)=>{
 66
             //
                         output+=`${data.name}`
             //
 67
                     })
 68
             //
                     document.body.innerHTML=output;
 69
             // },1000)
             // }
 70
 71
 72
             // function createData(newdata,calback){
 73
             //
                     setTimeout(()=>{
 74
             //
                         datas.push(newdata)
 75
             //
                         calback()
 76
             //
                     },3000)
 77
             // }
 78
             // // getData()
 79
             // createData({name: "shubh", Profession: "web doveloper"}, getData)
 80
 81
 82
 83
 84
             //promise
 85
             // const datas=[
             //
 86
                     {
                         name: "Ajay", Profession: "software doveloper"
 87
             //
 88
             //
                     },
             //
 89
                     {
 90
             //
                         name: "anuj", Profession: "software doveloper"
             //
                     }
 91
 92
             // ]
 93
 94
             // function getData(){
 95
             //
                 setTimeout(()=>{
 96
             //
                     output="";
 97
                     datas.forEach((data,index)=>{
             //
 98
             //
                         output+=`${data.name}
 99
             //
                     })
100
             //
                     document.body.innerHTML=output;
             // },1000)
101
             // }
102
103
104
             // function createData(newdata){
105
                     return new Promise((resolve, reject)=>{
106
             //
107
             // setInterval(()=>{
             //
                     datas.push(newdata);
108
109
             //
                    let error=true;
             //
                     if(!error){
110
111
             //
                         resolve()
```

```
112
                    }else{
113
                        reject("kuch sahi nahi hai....")
             //
             //
                    }
114
115
             // },2000)
116
             //
                    })
117
             // }
118
119
             // createData({name:"shubh",Profession:"web
120
     doveloper"}).then(getData).catch(err=>console.log(err))
121
122
123
124
125
126
127
             //async and await
128
129
130
131
             //master async sherians coding school
132
             // sync matlab ek ke bad dusra hoga jab tak ek command complete na ho, dusra nahi hoga
133
134
             //task a -5
135
136
             //task b -2
137
             //task c -15
138
             //task d -1
139
             //task e -4
140
             // total time 27 sec
             // console.log("hey1")
141
142
             // console.log("hey2")
143
             // console.log("hey3")
144
145
146
             // async matlab saare kaam ek sath shuru kardo jiska answer pahle aajaye uska jawaab dedena
147
148
149
             // kaise pata chalata hai ki hum sync code likh rahe ya async?
150
151
             // async ki pahchan
             // setInterval
152
153
             // setTimeout
154
             // Promise
155
             // fatch
156
             // axios
157
             // XMLHttpRequest
158
159
160
161
162
163
             // async js hai kya?
             // kai bar aapko final code depended hota hai kisi aur ke server par, is case main hame pata
164
     nahi hota ki ans uske server se kab laut kar aayega to hum kya nahi kr sakte is writing sync code, isse
     nipatane ke liye hum log async code likh deta taaki blocking na hoo and jab bhi answer aaye humara
     answer ke respect mai chalne wala code chal jaye
165
             // async code ka main motive hota hai ki un case main jisme hume pata nahi code ka answer ke
166
```

```
respect main koi particular code chala dena
167
             // example set time out
168
             // callback function humesha async code mein asnwer ane par chalta hai
169
170
             // console.log("hey1")
             // setTimeout(function(){
171
172
             // console.log("hey2")
             // },2000)
173
174
175
176
177
             // js is not asynchronous
178
             // async ka matlab do kam ek sath karna
179
             // jo bhi main stack par hota hai and jo bhi side stack par hota hai wo behind the scenes
180
     prossing kar sakte hai aur jab uski processing complete ho use main stack mai la kar chalaya ja sakta
181
182
             // main stack execution stack
183
184
             // event loop importent for interview
185
186
187
             // console.log("hey1")
             // console.log("hey2")
188
189
             // setTimeout(function(){
190
191
             //
                    console.log("hey3")
             // },0)
192
             // console.log("hey4")
193
194
195
             // single threading and multi threading
196
197
             // js single threading hai
198
             // ye requist bhejete hai
199
             // callback
200
201
             // fetch
             // axios
202
203
             // setTimeOut
             // setInterval
204
205
206
             // jab complete ho toh iska ans yaha hai
             // promise
207
208
             //then catch
             // try and catch
209
210
             // async await
211
212
213
214
             // callback =>function
215
             // callback hamesha ek function hota ye sirf tab chalta hai jab async code ja complete hojataa
     hai
216
217
             // example
             // fetch('www.indiawalesir.com').then()
218
219
             // var ans= new Promise((res,rej)=>{
220
                    if(true){
             //
             //
221
                         return res()
```

```
222
223
                    else{
             //
             //
224
                         return rej()
225
             //
                     }
             // })
226
227
             // ans.then(function(){
228
             // console.log("resolve ho gya")
229
             // }).catch(function(){
230
                    console.log("reject ho gay")
             // })
231
232
233
234
235
             // example
236
             // user will ask for a number between 0 se 9 and if the number is below 5 resolve if not
     reject
237
             // var ans=new Promise((res,rej)=>{
238
239
             //
                        var n=Math.floor(Math.random()*10);
             //
240
                        console.log(n)
241
             //
                        if(n<5){
242
             //
                         return res()
243
             //
                        }else{
             //
                         return rej()
244
245
             //
             // })
246
247
248
249
250
             // ans.then(function(){
251
252
                    console.log("below")
             // }).catch(function(){
253
254
                    console.log("abobe")
255
             // })
256
257
258
             // what is promise
259
             // a promise is an object that returns a value which you hope to receive in the future but not
     now
260
261
             // why we need promise
262
             // javascript always synchronous and single threaded language. it means javascript never waits
     for code or function result when they take some time is direct excute next code
263
264
265
             // example 1 problem
             // let data=1;
266
267
             // console.log(data);
268
             // data=2;
             // setTimeout(()=>{
269
             // console.log("timer"+data) //output 3
270
271
             // },2000)
272
273
             // data=3;
             // console.log("last"+data)
274
275
276
277
             // promise example
```

```
278
             // let data=new Promise((resolve, reject)=>{
279
                 setTimeout(()=>{
             //
                    if(true){
280
281
282
             //
                         resolve("done has been executed")
                    }else{
283
             //
284
             //
                         reject("code has been rejected")
285
286
             //
                    }
             // },2000)
287
288
             // })
289
             // data.then((item)=>{
290
             //
                    console.log(item)
291
             // }).catch((err)=>{
292
             //
                    console.log(err)
293
             // })
294
295
             // fetch ke andar promise wala code apne aap likha hota hai
296
             //
297
             // let data=fetch("http://127.0.0.1:5500/data.json");
298
             // data.then((item)=>{
299
                    return item.json() //json ko resolve karne ke liye
300
             // }).then((result)=>{
             //
                    console.log("2nd out",result)
301
             // })
302
303
304
305
             // promise chaining
306
307
             // let data=new Promise((res,rej)=>{
308
309
             //
                     if(true){
             //
310
                         res(10);
311
             //
                    }else{
             //
                         rej("reject ho gya")
312
             //
                    }
313
314
             // })
             // data.then((item)=>{
315
316
             //
                    console.log(item);
317
                    return item*10;
318
             // }).then((item)=>{
319
             //
                    console.log(item)
320
             // }).catch((err)=>{
321
                    console.log(err)
             //
322
             // })
323
324
325
326
327
             // finally keyword
328
329
             // finnal block hamesha chalega chahe reject ho ya resolve ho
330
331
             // let data=new Promise((resolve, reject)=>{
             //
                    setTimeout(()=>{
332
333
             //
                         resolve(10);
334
             //
                    },2000)
335
             // })
```

```
336
             // data.finally((item)=>{
337
                    console.log("this is finnal block")
338
             // }).then((item)=>{
339
340
                     console.log("this is resolve")
             // })
341
342
343
344
345
346
             // throw new error chalne par hamese catch block mai hi jayeha
347
             // let data=new Promise((resolve, reject)=>{
348
349
             //
                    setTimeout(()=>{
350
             //
                          resolve("done");
             //
                     },2000)
351
352
353
             // })
354
355
             // data.then((item)=>{
                    throw new Error("data issue")
356
             // console.log("then block",item);
357
             // }).catch((err)=>{
358
                    console.log("catch erroe",err)
359
             // })
360
361
362
363
             // promise.all
364
365
366
367
368
369
370
371
372
373
374
375
376
377
378
379
380
381
382
383
384
385
386
387
388
389
390
391
             // anuj bhaiya
392
             // in Javascript a promise is a good way to handle asynchronous operation it is used to fined
     out if the asynchronous operation is successfully completed or not.
```

```
393
             // a promise may have three state
394
             // pending
                          fullfilled
395
396
             // creating a promise
397
398
             // to create a promise we use the Promise() constructor
399
400
             // the promise constructor takes a function as an argument .
401
             // the function also accepts two function resolve() and reject() if the promise return
     successfully the resolve function is called and if an error occurs the reject function is called
402
403
404
             // using a promise
405
406
             // then() method
             // the then method is used with the callbacks when the promise is succrssfully fullfiled or
     resolve
408
409
             // the catch() method
             // the catch method is used with the callback when the promise is rejected or if an error
410
     occurs.
411
412
             // the finally() method
             // the finally method gets executed when the promise is either resolved successfully or
413
     rejected
414
415
416
             // const ticket=new Promise(function (resolve, reject){
417
             //
418
                    const isBoarded=true;
419
             //
                    if(isBoarded){
                         resolve("your are not in the flight")
420
             //
421
             //
                    }else{
             //
422
                         reject("your flight has been cancelled")
423
             //
                    }
             // })
424
425
             // ticket.then((data)=>{
426
                    console.log("wohoo",data)
427
428
             // }).catch((data)=>{
429
                    console.log("o no",data)
             // }).finally(()=>{
430
                    console.log(" i will always be executed")
431
432
             // })
433
434
435
436
437
             // example 2
438
             // function getCheese() {
439
             //
                    return new Promise((reslove, reject) => {
440
             //
                         setTimeout(() => {
441
             //
                             const cheese = " ;
442
             //
                             reslove(cheese);
443
             //
                         }, 2000);
444
             //
                    })
445
             // }
446
             // function makeDough(cheese) {
                    return new Promise((reslove, reject) => {
447
             //
```

407

```
448
             //
                         setTimeout(() => {
449
             //
                             const dough = cheese + " < "
450
451
             //
                             reslove(dough);
             //
                         }, 2000);
452
             //
453
                     })
454
             // }
             // function bakePizza(dough) {
455
456
             //
                     return new Promise((reslove, reject) => {
457
             //
                         setTimeout(() => {
458
                             const pizza = dough + "▶"
             //
459
460
             //
                             reslove(pizza);
             //
                         }, 2000);
461
462
             //
                     })
             // }
463
464
465
466
467
             // getCheese()
468
469
             //
                     .then((cheese) => {
             //
                         console.log("here is your cheese", cheese)
470
             //
                         return makeDough(cheese)
471
             //
472
                     }).then((dough) => {
473
             //
                         console.log("here is your dough", dough);
             //
474
                         return bakePizza(dough)
475
             //
                     }).then((pizza) => {
476
             //
                         console.log("here is your pizza", pizza);
477
             //
                     }).catch((data) => {
478
             //
                         console.log("some thing error")
479
             //
                     })
480
481
     // example 3 using async await
482
     // function getCheese() {
483
484
     //
                     return new Promise((reslove, reject) => {
     //
485
                         setTimeout(() => {
486
     //
                             const cheese = " ;
487
     //
                             reslove(cheese);
488
     //
                         }, 2000);
                     })
489
     //
490
     //
491
                function makeDough(cheese) {
     //
492
     //
                     return new Promise((reslove, reject) => {
493
     //
                         setTimeout(() => {
494
495
     //
                             const dough = cheese + " < "
                             reslove(dough);
     //
496
497
     //
                         }, 2000);
                     })
498
     //
499
     //
                }
     //
500
                function bakePizza(dough) {
501
     //
                     return new Promise((reslove, reject) => {
     //
                         setTimeout(() => {
502
503
                             const pizza = dough + ">"
504
    //
505
    //
                             reslove(pizza);
```

```
506
                         }, 2000);
     //
507
     //
                     })
     //
                 }
508
509
510
     // async function orderPizza(){
511
     //
            try{
512
     //
                 const cheese=await getCheese();
     //
                 console.log("here is your cheese",cheese);
513
     //
                 const dough=await makeDough(cheese);
514
                 console.log("here is your dough",dough);
515
     //
     //
                 const pizza=await bakePizza(dough);
516
     //
                 console.log("here is your pizza",pizza);
517
518
     //
            }catch(err){
     //
                 console.log("error happen",err);
519
520
     //
            }
     //
            console.log("ended")
521
522
523
     // }
524
525
     // orderPizza()
526
527
528
529
530
531
532
533
534
535
536
537
538
539
540
541
542
543
544
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563
```

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705
706
707
708
709
710
711
712
         </script>
713
     </body>
714
715
716 </html>
```