/\*

NaN = ka matlab hai k not a number, magar agar hm iss ki typeof dhekein tu

ye humein number show karega...

tu ye iss liye hota hai k NaN jo hai wo javascript mein aik failed operation

ki tarah treat kiyaa jata hai.. matlab k agar hm chahein k 2 ko

"ali" k sath multiply kar do tu ye tu possible nai hai

tu uss time javascript kahtiii hai k ye NaN hai

magar ye NaN ko iss liyee number treat krti hai k javascript kahti hai

k thaa tu ye number kaa hii operation maagr ye possible nai ho saka

magar thaa ye number kaa hi operation matlab X,ya + etc iss tarh k

tu mein iss ko number type hi dy rahi hon. hoga tu ye NaN magar ye possible

na ho saka ye operation qk ye aik failed number operation haii...

tu jab b failed number operation hogaaa tu uss ka type number hoga javascript mein

\*/

/\*

    DYNAMIC TYPING...

there is not static typing in javascript there is dynamic typing in the javascript

dynamic typing mean that we can change the data because ther is dynamic typing

in another languages we use like   int age = 12;

so we cannot do that in other languages like  age = "khan";

this will gives an error

while in java script we can do this because there is dynamic typing..

matlab k hm variable k sath int,bool,string etc ye cheezain nai likhtay

bss direct variable ko declare kar letay hain...  (just like python)..

in javascript we can do it like

let a = 12;

// a = true;

// a = "ali";

// a = []

and this will not give you any error. because there is dynamic typing inside javascript

\*/

//   /\*

\*/

TYPE OF QUIRKS

/\*

hm kisi b value ka type check kr sktay hain k ye number hai ya

string hai ya kuch or etc...

jiss k liyee hm typeOf ka keyword hai jiss ka use kartay hain hm...

typeof 12

QUIRKS: uss ko kahtay hain jaisay matlab koii ghalti etc hai javascript mein like

agar typeof NaN likhein tu NaN ka matlab hai not a number magar agar hm typeof NaN

likhein tu ye humein number show karega jo k ghalat hai

agar hm  likhein  console.log(NaN===NaN) tu chahiyee tu  ye thaa k ye true deta

magar ye false deta hai jo k ghalat hai tu ye b aik quirk hai...

tu iss tarah k matlab hm bugs kah sktay hain.. in ko quirks kahtay hain

jo k bohat saray hain javascript mein

\*/

console.log(typeof 12); // this will print number because 12 is a number.

console.log(typeof "ali");

TYPE COERSION :

// Type Coersion

/\*

type coersion ka matlab hai k jisme aik ek type automatically dosray mein change

ho jati hai jaisay for eg

"5" + 1;

baki languages mein humein ye error dega qk aik string hai or doosraa number hai

tu dono add nai ho sktay magar

java script mein ye possible hai orr wo TYPE CORESION k waja say

"5"+1; tu yaha par ye dono ko concatinate kar dega matlab

ye "51" aisa print karega.

ab baki log kahengay k ye "5" ko number q nai banaya tu uss ki reason hai

k javascript kahta hai k + k right ya left side prr agar aik operand b string

nikal aya tu ye jo + haii ye addition nai karega ye concatenate karay ga.

magar agar hm - likhein like   "5" - 1; tu ab ye qk + tu 2 kaam karta thaa

add k karthaa thaa or concatenate b karta thaa tu iss waja say aik side prr

javascript ko string dhikh gaya tu uss nay addition k bajaye concatenation

kar diii magar minus k time prr - tu siraf aik hii kaam karta hai tu ye jo jaavscript

haii ye 5 say 1 ko minus kar dega orr 4 ans ajaye gaa orr yee jo 5 string thaa

ye convert ho jaye gaa number mein

\*/

console.log("4" + 1);

console.log("4" - 1);

let a = "44";

let b = 5;

let c = a + b; // this will answer 445

console.log(c);

console.log(typeof c);

let d = "29";

let e = 1;

let f = d - e; // this will answer 28

console.log(f);

console.log(typeof f);

TRUTHY AND FALSY VALUES

//          TRUTHY AND FALSY...

/\*

hm conditional statement banatay hain tu hm uss mein koii value detay hain

tu ab javascript walo ko pata tha k ye kuch b de skta hai tu uss nay

in saro values ko truty and falsy values mein divide kar diya hai

jaisay k for eg agar hm nay koii if statement banaya orr uss mein siraf

khaali ye cheezain likh dii orr kuch naii likhaaa tu ye false consider hoga

orr wo cheezain ye hain..

0, false, "", NaN, Undefined, Null, Document.all

agar humein nai pata k ye falsy value hogi ya truthy tu hm ye trick perform kar

sktay hain k uss cheez k aagay  !! ye laga dein orr print kar dein tu

ye humein kah dega k ye truthy value mein change hoga ya falsy

like console.log(!!NaN); console.log(!!Number); console.log(!!Undefined);

console.log(!!"");

tu iss k peechay logic ye hai k javascript mein ya tu value truthy nature ki hogi ya falsy nature ki. Tu jo kuch values dii hain ooper ye falsy nature ki hain

tu hm !! laga kar kisi b value ki nature ki find kar sktay hain tu jab hm siraf aik ! lagatay hain tu ye uss value ki nature ko ulta matlab opposite kr dega jo k ye uss value ki sahi nature naii hai.. tu again jab hm doosara ! lagayeingay tu ye uss ko dobara opposite kar dega jo k humein sahi nature de dega uss value ki

jaisay for eg

if(null){

}

tu ab hm nay condition mein kuch b naii likha magar yaha prr kuch aana zaroori haii

tu iss condition mein javascript jo hai wo iss ki nature dhekegay gii

k falsy hai ya truthy hai tu agar ooper ki cheezon mein kuch b huaa tu wo falsy consider

hoga. jaisay k hm nay ooper null likhaa haii tu ab javascript khud iss ko falsy nature

consider kar legi... k ye condition false hai ye false mein khud change ho jaye gi

iss k ilawa baki sab truthy hai jo b values hain jaisay k

if(-1){

}  tu ab ye value truthy hai true mein convert ho jaye gi..

\*/