

10 May 2025 → Saturday  
11am

Cont. day = ~~0~~ 1;

"string" → "10 May 2025"

Cont = 139<sup>th</sup>  
1. which day we are in  
2. Can also calculate week we are in in the year 2025

$$\begin{aligned} \text{day} &= 138 / 7 = \text{Week 19} \\ &\quad \text{(Math. floor)} \\ &= 138 \% 7 = 5 \quad \begin{matrix} \text{(Round down int)} \\ \text{Mon/Tues.} \\ \text{Wed/Thurs.} \\ \text{Friday} \end{matrix} \end{aligned}$$

if (day == 1) { return "Monday"

7 / 7 = 10 to 6 → Monday  
to Sunday.

if (day =

num = 0

// Return Week day - Mon Tues.

# switch (num) {

case 0: return break

case 1: return break  
default: Not good input num

365 day → 139<sup>th</sup> Saturday

10 May 2025 → 139 % 7 → 5  
→ In Feb, Mar, Apr

# Iterative statements

for loops	while	do {
for (var initialization condition; increment/decrement)	while (condition)	while (condition)
{ start ! ; }	{ start ? ; Increment/decrement }	{ start ! ; Increment/decrement ; condition }

Pattern:

```

1 2 3 4 5
1 2 3 4
1 2 3
1 2

```

for → 1 to 5  
while →  
do while →

for row 5 to 0 dec.  
for col 0 to row number.  
prints no. (col).

```

5 → 0 1 2 3 4 5
      0 1 2 3 4

```

→ while & for

```

do { start !
    } while (condition);

```

0 0 9 9 9 → Password.

Input from the user

D o g g y. → Password

about 1.  
↑

original - pwd = "claggy"  
enter - pwd = print('Enter passw')  
if

# Data Types

1. Array -  $\rightarrow$  Continuous collection of Data

push, pop  
length, to str  
 2. Hash Table

```
const arr = [1, 'a', 'puneeth', 10.5]
            index 0      1      2      3
```

$\rightarrow$  Accessing element  $O(1)$

```
const details = {
  name: 'Puneeth', last name: 'P',
  age: 300,
  address: 'Test',
  full Name: fun() {
    this.name + the last name
  },
}
```

$\rightarrow$  Key helps using data faster  
 $\rightarrow$  Hash Table  $\rightarrow$  inside another hash Table

Array Method:

try in 10 min

<ul style="list-style-type: none"> <li>find Index</li> <li>filter</li> <li>join</li> <li>push &amp; pop</li> <li>some</li> </ul>	<ul style="list-style-type: none"> <li><u>reduce</u></li> <li><u>slice</u></li> <li><u>splice</u></li> </ul>
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find Index  $\rightarrow$  Index

filter  $\rightarrow$  funtion

push & pop

join  
some

7, 8, 9  
 (1, 2, 3, 4, 5)

filter  $\rightarrow$  funtion check when  $>$  length

values + / -

slice - arr(start, end)  $\Rightarrow$  shallow

splice - arr(index, delete count, delete insert,  
insert 2, ... insert n)  
 $\Rightarrow$  not mutate original arr.

$\rightarrow$  Shallow & Deep Copy.

Reduce Method  $\rightarrow$   
(accumulator, current Value)  
 $\Rightarrow \{ \underline{\quad} \}$

$\}, \text{start of accumulator value})$

$\rightarrow [1, 2, 3, 4, 5].\text{reduce}$

$((acc, cur) \Rightarrow \{ \downarrow \}, \underline{0})$

return acc..  
 $\rightarrow \underline{\underline{acc = acc + cur}}$