Season - 9   13rd Aug 2022

Today   While loop
           Do while loop
            for loop
            switch

While loop (True or False) ⇒ pre condition

```
While (true)
    { console.log ("Hello");
    }
```
✓ check first
✓ execution

⇒ Infinite loop

```
let y=7;
⇒  while (y <= 5)
        {
            console.log ("Hello");
            y++;
        }
```
output ⇒ "NO"

do - while ⇒ Post condition → execute block →

```
let y = 7;
do {
    console.log ("Hello");
    y++
} 
while (y <= 5)
```
output = Hello

①

for loop

```
let y = 1;                          // initialization

while ( y <= 5 )                    // condition
    {
        console.log ("Hello", +y );
        y++;                        // increment / decrement
    }
```

```
         init ;    condi ;   inc
for ( let i=1 ;  i<=s ;  i++)
    {
        console.log ("Hello" + i );
    }
```

⇒ Why use while , for, do-while ?

Switch

Continue : skip the day offer next day

break : stop the loop , jump out the loop
                    training : cancel, next day year

deofault :

Nested loop

```
for (let i=1; i<=4; i++)
{
    for (let J=1; J<=5; J++)
    {
        console.log (J);
    }
    console.log ("the end");
}
```

Real time used :

Switch case:

```
left let day = "wed";
if switch(day)
{
    case "sat";
    case "sun";
        console.log ("6am");
                    break;
    case "mon":
    case "tue":
    case "thus":
        console.log ("8am");
            break;
    case "wed";
        consol.log ("7am");
        break;
    default:
        console.log ("keep drum");
}
```

Functions
- procedures — C language
- function — Java language
- objects

first function are first-class citizens.

DRY — Don't Repeat Yourself

- Don't write code duplicate because crime, criminal

Keyword

```
function doSomething ()          //defining
{
    //      let name = "Navin";
    //          consol.log (name);
    //
    //
}

doSomething ()  // calling
```

⟹ What is function?
    It is a block of statement which you can execute just by calling them are called function.

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Note
- you are only define no output
  because calling is output.
- you are calling multiple-times.
- you are first call 4 after execute
  are known as Hoisting
- Function name also write verbal types.
- Call the function is most important.

```
function add ()
{
    let num1 = 8;
    let num2 = 6;
    log.console (num 1 + num 2);
}
```

~~Doubt~~

```
add ();
```

Pass valued

```
let num1 = 8;
let num2 = 6;
let num3 = 9;

function add (n1, n2 n3 = 0)
{
    console.log (n1 + n2 + n3)
}

add (num1, num2)          // add (8, 6)
```

(6)

Return ()

```
let num 1 = 8;
let num 2 = 6;
let num 3 = 9;

$function add (n₁, n₂, n₃ = 0)
{
    return n1 + n2 + n3;
}
    let result = add (num1, num2);
    console. log (result);
```

Object — Real life problem ← why?

Object is very very important because
every seen behind work liker an
object.

→ diffinition Object will have values properties
basically a key and and a value
pair example.

There are two types object ex
Mutable object →
                    A mutable object which means
is an object where state can be modified after
                                                created

Immutable object →
                    Immutable object which means
Who state cannot be changed once object
is created.

String & Numbers is Immutably.

① Way — Key : Value

create object

```
let book = {
    "title": "javascript",
    "author": "John",
    "year": 2018,
    "num_copies": 1000
}
```

Key : values

// only title   console.log (book.title);
// All value   console.log (book);

First name & last

```
"Author": {
    "first Name": "john",
    "last name": "ove"
},

console.log (  book.author);
```

② — Way   New - operator

```
let book = new Object ();
book.title = "Harry Potter";
book.author = "JK Rowling";
book.pages = 400;
book.publishes = "Blooms burry";
book.year = 1997;

console.log (book);              // all
        (book.page);            // only - one
```

(8)

Modify

```
book.pages = 600;
book.authors = "Navin Reddy";
console.log(book.authors);
```

Another way Modify

```
book["authors"] = "Sanjeevan";

console.log(book.authors);
```

Note

- Object Create a upper case.

3rd Way   create - function

Do'nd worry Code

```
let obj1 = Object.create({x:1, y:2});
let o2 = obj1.x + obj1.y;
console.log(o2);
```

⟹ Car Example

```
const myCar = new Object();
myCar.company = "BMW";
myCar.Model = "Xs"
myCar.year = 2019;
myCar.Color = "black"
myCar.Price = 20,000;
myCar.fuel = "petrol;
console.log(myCar);
```

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⇒ create of object Student

name, age, year pasing out, Mark

age

⇒ console.log ('Student : ', Student, education)

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