

```
* document.querySelector("btn").addEventListener("click",  
    handleClick);  
function handleClick() {  
    alert("Hello");  
}  
  
* document.querySelector("btn").addEventListener("click",  
    function() {  
        alert("Hello");  
    } );  
  
for (var i=0 ; i < document.querySelectorAll(".drum").length ; i++) {  
    document.querySelectorAll("btn")[i].addEventListener("click",  
        handleClick);  
}  
  
* function add (num1 , num2) {  
    return num1 + num2;  
}  
  
* function multiply (num1 , num2) {  
    return num1 * num2;  
}  
  
* function calculator (num1 , num2, operator) {  
    return operator (num1 , num2);  
}  
  
+ input : calculator (2 , 3 , add);
```

\* debugger ; to see the process / step one by one , how  
(shift + enter) the process goes through.  
calculator (3,4 , multiply);

click : ↓

\* Functions which take functions as inputs are called higher order Function.

\* var audio = new Audio ("sounds / tom-1.mp3");  
audio.play ();

\* this : get identity of the object (here after click get ID)

```
* for (var i=0 ; i < document.querySelectorAll ("drum").length ; i++) {  
  document.querySelectorAll ("drum") [i].addEventListener ("click", function () {this.style.color = "white";})}
```

## \* Object

```
var bellboy1 = {  
  name : "Timmy",  
  age : 19,  
  languages : ["French", "English"]  
}
```

```
alert ("Hello" + bellboy1.name);
```

## # Constructor Function

first letter always capital.

```
function BellBoy (name, age, hasWorkPermit, languages) {  
    this.name = name;  
    this.age = age;  
    this.hasWorkPermit = hasWorkPermit;  
    this.languages = languages;  
}
```

```
var bellboy1 = new BellBoy ("Mohit", 20, true, ["German",  
                                                 "English"]);
```

```
*function HouseKeeper (yearsOfExperience, name, work) {  
    this.yearsOfExperience = yearsOfExperience;  
    this.name = name;  
    this.work = work;  
}
```

```
var housekeeper1 = HouseKeeper (2, "Utkarsh", "Cleaning");  
console.log (housekeeper1.name);
```

```
* var buttoninnerhtml = this.innerHTML;  
switch(button.innerHTML) {
```

```
    case "w":
```

```
        var audio = new Audio("sounds/tom-mp3");
```

```
        audio.play();
```

```
        break;
```

```
    case "a":
```

```
        var audio = new Audio("sounds/tom 2-mp3");
```

```
        audio.play();
```

```
        break;
```

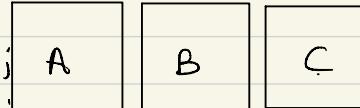
```
}
```

## #Drum Kit

```
<h1> Drum Kit </h1>
```

```
<div class = "set">
```

```
<button class = "drum"> A </button>;  
<button class = "drum"> B </button>;  
<button class = "drum"> C </button>;  
</div>
```



```
document.addEventListener ("keypress", function () {  
    console.log ("key pressed");  
    for (var i = 0; i < document.querySelectorAll ("drum").length; i++) {  
        document.querySelectorAll ("button")[i].addEventListener ("keypress",  
            function () {  
                switch (this.innerHTML) {  
                    case ("A") :  
                        var audio1 = new Audio ("sounds / tom1-mp3");  
                        audio1 . play ();  
                        break;  
                    case ("B") :  
                        var audio2 = new Audio ("sounds / tom2-mp3");  
                        audio2 . play ();  
                        break;  
                    case ("C") :  
                        var audio3 = new Audio ("sounds / tom3-mp3");  
                        audio3 . play ();  
                        break;  
                    default . console . log ("Wrong Button");  
                }  
            }  
        );  
    }  
});
```

\* Function Audio (file location) {  
this.fileLocation = file location;  
this.play = function () {  
3  
y

\* Key press (event listener)  
for keyboard keys

+ document.addEventListener ("keypress", function (event) {  
makeSound (event.key);  
}) which key was pressed : property

function makeSound (key) {  
switch (key) {  
case "w": var tom1 = new Audio ("sounds / tom-1-mp3");  
tom1.play ();  
break;  
case "a": var tom2 = new Audio ("sounds / tom-2-mp3");  
tom2.play ();  
break;  
}

\* Function anotherAddEventlistener (Type of Event, callback) {

```
var event that happened = {
  event type: "keypress",
  key: "p",
  duration of key press: 2,
}
```

```
if (Type of Event == event that happened.event type) {
  callback (event that happened);
}
```

```
another addEvent listener ("keypress", function (event) {
  console.log (event);
});
```

\* buttonAnimation (this.innerHTML),

\* button animation (event.key);

\* Function button animation (currentKey) {

```
var activeButton = document.querySelector ("." + currentKey)
activeButton.classList.add ("pressed");
  select class  
already designed in CSS
```

setTimeOut (function () {

```
activeButton.classList.remove ("pressed");
}, 100);
```