```
for loop

for(initialisation; condition; updation) {
    //do something
}

for (let i=1; i<=5; i++) {
    console.log(i);</pre>
```

}





# **Infinite Loops**

```
for(let i=1; i>=0; i++) {
for(let i=1; i<=5; i--) {
for(let i=1; ; i++) {
```



```
let n = prompt("write your number");
n = parseInt(n);

for(let i=n; i<=n*10; i=i+n) {
    console.log(i);
}

// for(let i=4; i<=40; i=i+4) {
    // console.log(i);
    // }</pre>
```

## **Nested** for loop

```
for (let i=1; i<=3; i++) {
    for (let j=1; j<=3; j++) {
        console.log(j);
    }
}</pre>
```

```
for(let i=1; i<=3; i++) {
    console.log(`outer loop ${i}`)
    for(let j=1; j<=3; j++) {
        console.log(j);
    }
}</pre>
```

### while loop

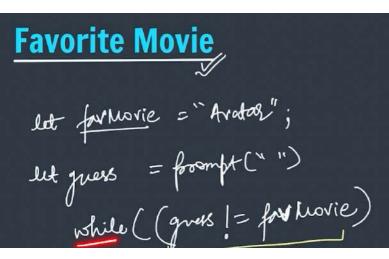
```
while (condition) {
  //do something
}
```

```
let i = 1;
while (i <= 5) {
    console.log(i);
    i++;
}</pre>
```

```
let i=5;
while(i>=1) {
    console.log(i);
    i++;
}
```

# Favorite Movie

let farmorie = "Avatas".



1) right guess = farkante 2) guess = "guit"

# break keyword loop execution ital

```
const favMovie = "avatar";

let guess = prompt("guess my favorite movie");

while(guess != favMovie) {
    if(guess == "quit") {
        console.log("you quit");
        break;
    }
    guess = prompt("wrong guess. please try again");
}

if(guess == favMovie) {
    console.log("congrats!!");
}
```

#### **Loops with Arrays**

```
let fruits = ["mango", "apple", "banana", "litchi", "orange"];
for(let i=0; i<fruits.length; i++) {
    console.log(i, fruits[i]);
}</pre>
```

```
for(let i=fruits.length-1; i>=0; i--) {
   console.log(i, fruits[i]);
```

#### **Loops with Arrays**

**Nested Loops with Nested Arrays** 

```
let heroes = [ ["ironman", "spiderman", "thor"], ["superman", "wonder woman", "flash"]];

for(let i=0; i<heroes.length; i++) {
    console.log(`List #${i}`);
    for(let j=0; j<heroes[i].length; j++) {
        console.log(heroes[i][j]);
    }
}</pre>
```

#### for of loop

```
for (element of collection) {
    //do something
}

let fruits = ["mango", "apple", "banana", "litchi", "orange"];

for(fruit of fruits) {
    console.log(fruit);
}

for(char of "apnacollege") {
    console.log(char);
```

#### **Nested for of loop**

```
let heroes = [ ["ironman", "spiderman", "thor"], ["superman", "wonder woman", "flash"]];
for (list) of heroes) {
    for(hero of list) {
        console.log(hero);
    }
}
```

# **Todo App**

- list to show all todos
- add to add a todo
- · delete to delete a task
- quit to exit the todo



```
let todo = [];
let req = prompt("please enter your request");
while(true) {
    if(req == "quit") {
        console.log("quitting app");
        break;
    }
    if(req == "list") {
        console.log("----");
                                                          I
       for(let i=0; i<todo.length; i++) {</pre>
            console.log(i, todo[i]);
        console.log("-----
    } else if(req == "add") {
        let task = prompt("please enter the task you want to add");
        todo.push(task);
        console.log("task added");
```

```
} else if(req == "delete") {
    let idx = prompt("please enter the task index");
    todo.splice(idx, 1);
    console.log("task deleted");
} else {
    console.log("wrong request");
}

req = prompt("please enter your request");
}
```