

Black & White Series

# Loop

**JavaScript for C or Java Programmers**

# while Loop

```
while (<condition>)  
    <block>
```

Tests `<condition>` in the cycle beginning

```
do  
    <block>  
while (<condition>)
```

Tests `<condition>` in the cycle ending

# Example 1

```
let week = 0
const limit = Math.trunc(Math.random() * 8)
console.log('limit: ' + limit)
while (week < limit) {
  week++
  console.log('weekday: ' + week)
}
```

```
limit: 0
```

```
limit: 2
weekday: 1
weekday: 2
```

# Example 2

```
let week = 0
const limit = Math.trunc(Math.random() * 8)
console.log('limit: ' + limit)
do {
  week++
  console.log('weekday: ' + week)
} while (week < limit)
```

```
limit: 0
weekday: 1
```

```
limit: 2
weekday: 1
weekday: 2
```

# for Loop

```
for (<initialization>; <condition>; <increment>)  
    <block>
```

- **<initialization>**
  - executed before entering
  - usually initializes a control variable
- **<condition>**
  - tested on entry and every complete cycle
- **<increment>**
  - executed every complete cycle
  - usually increments the control variable

# Example

```
const limit = Math.trunc(Math.random() * 8)
console.log('limit: ' + limit)
for (let day = 1; day <= limit; day++)
  console.log('weekday: ' + day)
```

```
limit: 0
```

```
limit: 2
weekday: 1
weekday: 2
```

# References

- Mozilla MDN - <https://developer.mozilla.org>
- Eloquent JavaScript - <https://eloquentjavascript.net/>

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