

# Client Side Scripting





## CO1

- **Create interactive web pages using program flow control structure**

## LO3

- Develop JavaScript to implement loop for solving the given iterative problem



# TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme												
L	T	P		Theory						Practical						
				Paper Hrs.	ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
3	-	2	5	3	70	28	30*	00	100	40	25#	10	25	10	50	20



# CONTENTS

1. For loop
2. While loop
3. Do.. while loop
4. For... in loop

# FOR LOOP



- It is a looping statement which executes block of code N times.

## Syntax:

```
for (initialization; condition; increment/decrement)
{
    //block of statements
}
```

- In for loop, program controller first goes to initialize section, after that it will test the condition.
- if condition is true then it will executes body of for loop and after that goes to increment/decrement section.
- Again it will check the condition and if condition is true then it will again executes the body of for loop. This process will continue till condition becomes false.

# FOR LOOP- EXAMPLE



```
<html>
<body>
  <script type = "text/javascript">
    var i;

    document.write("Output of For Loop=");

    for(i = 1; i <= 10; i++)
    {
      document.write("Current value of i : " + i );
    }

  </script>
</body>
</html>
```

# WHILE LOOP



- 'while' is a predefined keyword of JavaScript.
- It is called as entry controlled loop.
- It is a looping statement which executes block of code N times.

## Syntax:

```
while(condition)
{
    //block of statements
}
```

- In while loop, program controller first test the condition. If condition is true then it will executes body of for loop.
- Again it will check the condition and if condition is true then it will again executes the body of while loop.  
This process will continue till condition becomes false.

# WHILE LOOP- EXAMPLE



```
<html>
<body>
  <script type = "text/javascript">

    var i=1;

    document.write("Output of For Loop=");

    while(i<=10)
    {
      document.write("Current value of i : " + i );

      i=i+1;
    }

  </script>
</body>
</html>
```



# DO-WHILE LOOP



- 'do' & 'while' both are predefined keyword of JavaScript.
- It is called as exit controlled loop.
- It is a looping statement which executes block of code N times.

## Syntax:

```
do
{
    //block of statements
}while(condition);
```

- In do- while loop, program controller first executes the body of loop and then test the condition.
- If condition is true then it will again executes body of loop.  
This process will continue till condition becomes false.
- In do-while loop, program controller executes body of loop at least once even if condition becomes false very first time.

# DO-WHILE LOOP- EXAMPLE



```
<html>
  <body>
    <script type = "text/javascript">

      var i=1;

      document. Write("Output of For Loop=");

      do
      {
        document. Write("Current value of i : " + i );
        i=i+1;
      }while(i<=10);

    </script>
  </body>
</html>
```

# FOR-IN LOOP



- 'for' is a predefined keyword of JavaScript.
- The for...in loop is used to loop through an object's properties.
- In each iteration, one property from object is assigned to variable name and this loop continues till all the properties of the object are exhausted.

## Syntax:

```
for (variable name in object)
{
    //block of code
}
```

## Example:

```
<html>
  <body>
    <script type = "text/javascript">

      var aProperty;
      document.write("Navigator Object Properties<br> ");

      for (aProperty in navigator)
      {
        document.write(aProperty);
        document.write("<br>");
      }

    </script>
  </body>
</html>
```



## QUIZ TIME

**Q1. What are the three important manipulations done in a for loop on a loop variable?**

- a) Updation, incrementation, initialization
- b) Initialization, testing, Updation
- c) incrementation, initialization, testing
- d) Testing, Updation, incrementation

► **Ans. b. Initialization, testing, Updation**

**Q2. What happens in the following JavaScript code?**

```
var count = 0;
while (count < 10)
{
  console.log(count);
  count++;
}
```

- a) The values of count are logged or stored in a particular location or storage
- b) The value of count from 0 to 9 is displayed in the console
- c) An error is displayed
- d) An exception is thrown

► **Ans. b. The value of count from 0 to 9 is displayed in the console**

## QUIZ TIME



**Q3.What will happen if the body of a for/in loop deletes a property that has not yet been enumerated?**

- a. The property will be stored in a cache
- b. The loop will not run
- c. That property will not be enumerated
- d. All of the mentioned

► **Ans. c. That property will not be enumerated**

**Q4. One of the special feature of an interpreter in reference with the for loop is that ?**

- a. Before each iteration, the interpreter evaluates the variable expression and assigns the name of the property
- b. The iterations can be infinite when an interpreter is used
- c. The body of the loop is executed only once
- d. All of the mentioned

► **Ans. a.**

**Before each iteration, the interpreter evaluates the variable expression and assigns**



# Thank You