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JavaScript:-

1. **Strings**
   - A JavaScript string is zero or more characters written inside the quotes.
   - The String object is used to represent and manipulate a sequence of characters.
   - String can be write in Single ' ' quotes and double " " quotes.
   - If we declare new variables with strings and concatenate them with a '+' sign.
   - Template Literals are written under " ` " backtick sign.
   - $ symbol is used here to pick that particular string from the variable.
   - The main benefit of using this method is, we can use both double quotes or single quotes to identify the strings.
   - To extract the number of characters in a particular string we can take the help of length function. Synatx- var len = name.length;

     console.log(`Length of name is ${len}`)
   - "\n" is an escape sequence that is used to take the string after it in the next line. It's a **new line** character.

2. **String Functions**
   - These functions are really helpful in extracting the strings either from DOM manipulation or from APIs or AJAX sources.
   - Syntax-

     var str = "This is a string";
     console.log(str);
   - those functions of strings by which we can either modify, alter, slice, break, etc. the strings.
   - It is to locate the position of any word in the string.

     Synatx-
     // First occurrence of a substring
     var position = str.indexOf('is');
     console.log(position)
   - **Indexof()** function is used here to locate the position of any string It gives the first occurrence of the substring.
   - To get the position of the last substring, we can use the function **lastindex0f().**
   - **Syntax-** // Last occurence of a substring

     position = str.lastIndexOf('is');
     console.log(position)
   - To get a substring from a string we can use the slice function.
   - **Syntax-**

     var substr = str.slice(1,7);
     console.log(substr)
   - We can also replace a particular string to another string with the help of replace() function.
   - Syntax-

     var replaced = str.replace('string', 'Harry');
     console.log(str)
     console.log(replaced)

- We can also convert the whole strong to an uppercase or lowercase letters.
- Syntax-

```
console.log(str.toUpperCase());
console.log(str.toLowerCase());
```

- To concat any two strings, we can take the help of conact() function.
- Syntax-

```
var newString = str.concat('New String')
console.log(newString)
```

- To remove all the white spaces in the string, we can use Trim() function.
- Syntax-

```
var strWithWhitespaces = "   this contains       whitespaces   ";
console.log(strWithWhitespaces)
console.log(strWithWhitespaces.trim())
```

- To extract any character from a string, we can use charAt() function.
- Syntax-

```
var char2 = str.charAt(2);
console.log(char2)
```