

Loops in JS

Loops are used to execute a piece of code again & again

for Loop

```
for (let i = 1; i <= 5; i++) {  
    console.log("apna college");  
}
```

Loops in JS

Infinite Loop : A Loop that never ends

Apna College

Loops in JS

while Loop

```
while (condition) {  
    // do some work  
}
```

Loops in JS

do-while Loop

```
do {  
    // do some work  
} while (condition);
```

Loops in JS

for-of Loop

string and array use

```
for (let val of strVar) {
```

```
    //do some work
```

```
}
```

ex:

```
let str="pakistan";  
for(let i of str)  
{  
    console.log("i=",i);  
}
```

ex2:

```
let str="pakistan";  
let size=0;  
for(let i of str)  
{  
    console.log("i=",i);  
    size++;  
}  
console.log("size=",size);
```

output:

p
a
k.....so on
n

Loops in JS

for-in Loop

```
for (let key in objVar) {  
    //do some work  
}
```

Let's Practice

Qs1. Print all even numbers from 0 to 100.

Apna College

Let's Practice

Qs2.

Create a game where you start with any random game number. Ask the user to keep guessing the game number until the user enters correct value.

```
let gameno=5;
*/ let n=prompt("enter no");
while (n !== gameno)
{
n=prompt("enter corr no");
}
console.log("correct enter");
```


Strings in JS

String is a sequence of characters used to represent text

Create String

```
let str = "Apna College";
```

String Length

```
str.length
```

String Indices

```
str[0], str[1], str[2]
```

Template Literals in JS

A way to have embedded expressions in strings

```
`this is a template literal`
```

String Interpolation

To create strings by doing substitution of placeholders

```
`string text ${expression} string text`
```

```
let obj = {  
  item: "pen",  
  price: 10,  
  
};  
let output = 'the cost of ${obj.item} is ${obj.price}  
rupees';  
console.log(output);  
console.log("the cost of", obj.item, "is", obj.price, "  
rupees");  
//Template Literals  
  
let specialString = `This is a template literal`;  
console.log(typeof specialString);
```

String Methods in JS

These are built-in functions to manipulate a string

- `str.toUpperCase()`
- `str.toLowerCase()`
- `str.trim()` // removes whitespaces

String Methods in JS

- `str.slice(start, end?)` // returns part of string
- `str1.concat(str2)` // joins str2 with str1
- `str.replace(searchVal, newVal)`
- `str.charAt(idx)`

Let's Practice

Qs1. Prompt the user to enter their full name. Generate a username for them based on the input. Start username with @, followed by their full name and ending with the fullname length.

eg: user name = “shradhakhapra” , username should be “@shradhakhapra13”

```
let specialString = `This is a template literal`;
```

```
console.log(typeof specialString);  
let fname=prompt("enert name");  
let lname=prompt("enert last name");  
let full=fname.concat(lname);  
full="@".concat(full);  
//fullnae.  
console.log("@"+full+full.length);
```