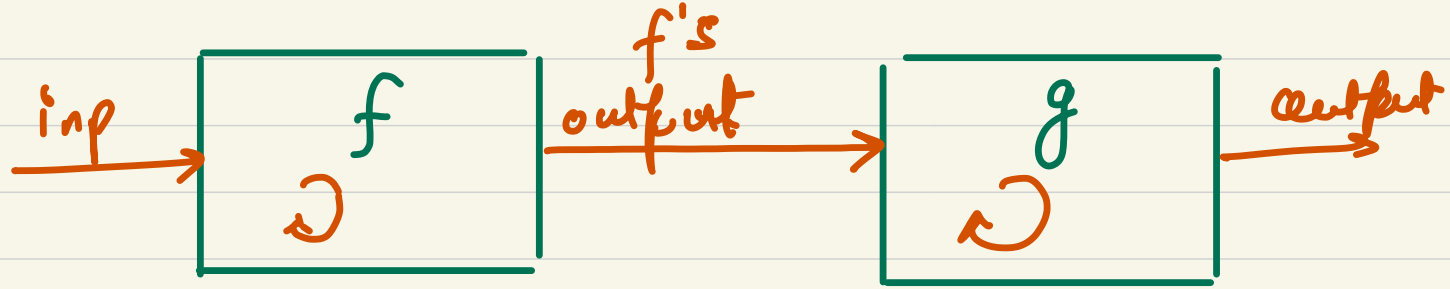


Q how is printing a value diff than giving an output?

1) when you print a value you cannot use it for
some operation



to generate output in JS functions we can use
return keyword.

the moment you hit return the funcⁿ stops the
execution.

```

1 → function isEvenOrOdd(x) {
2     if(x % 2 == 0) {
3         // if x is divisible by 2
4         return "even";
5     } else {
6         return "odd";
7     }
8 }
9
10 → const ans = isEvenOrOdd(10);
11 console.log(ans);

```

Handwritten annotations on the code:

- A dashed orange arrow points from the `return` statement on line 4 to the `return` statement on line 10.
- An orange arrow points from the `return` statement on line 4 to the word string.
- An orange arrow points from the `return` statement on line 10 to the word return.
- The word string is underlined.
- The word return is underlined.
- The word function is underlined.

the moment JS reads
function keyword, it understands
that we want to define a
function.

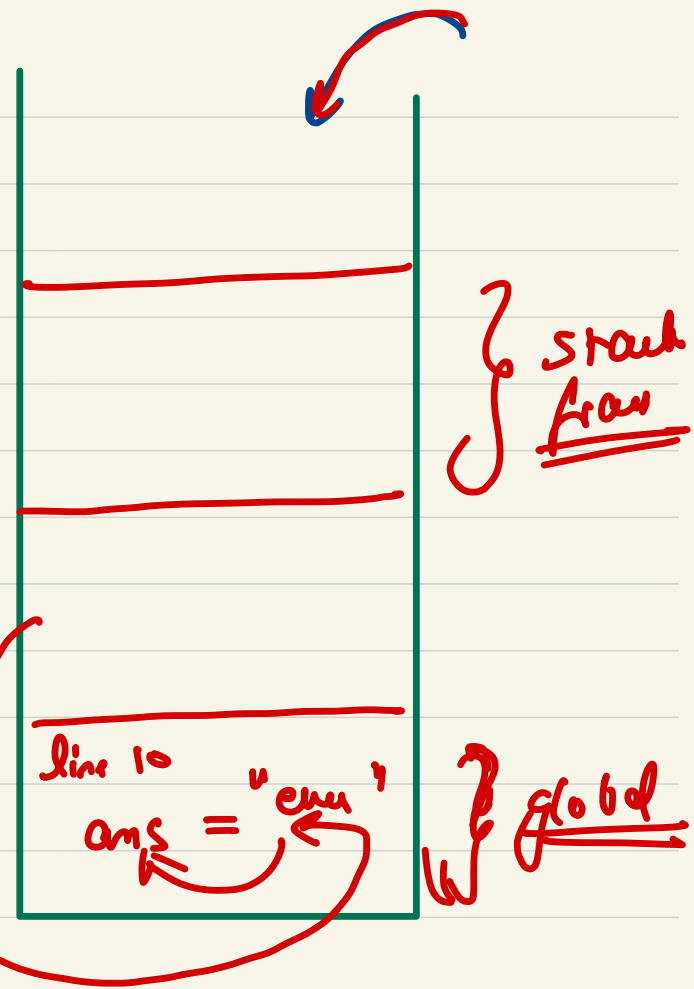
the moment we hit return statement func exec
immediately stops.

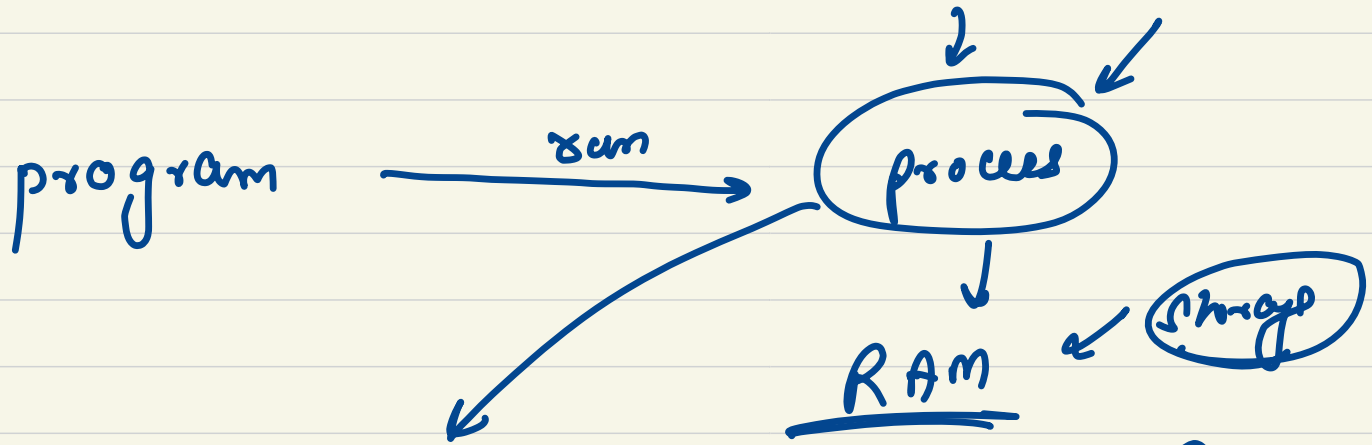
```
1 function isEvenOrOdd(x) {  
2   if(x % 2 == 0) {  
3     // if x is divisible by 2  
4     return "even";  
5   } else {  
6     return "odd";  
7   }  
8 }  
9  
10 const ans = isEvenOrOdd(10);  
11 console.log(ans);
```

(call stack
stores func"
call

LIFO

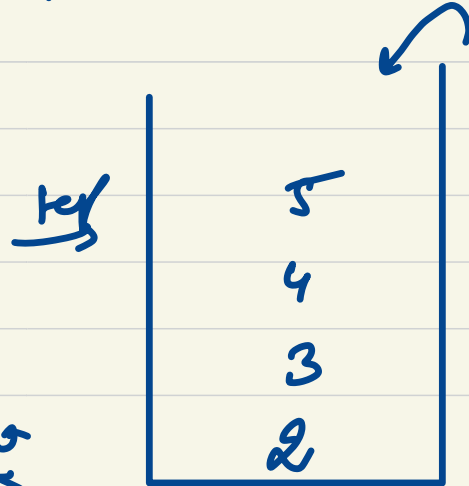
linear
memory
store





a lot of things together
makes a process

LIFO
last in first out



There are 3 main storage areas in a process →

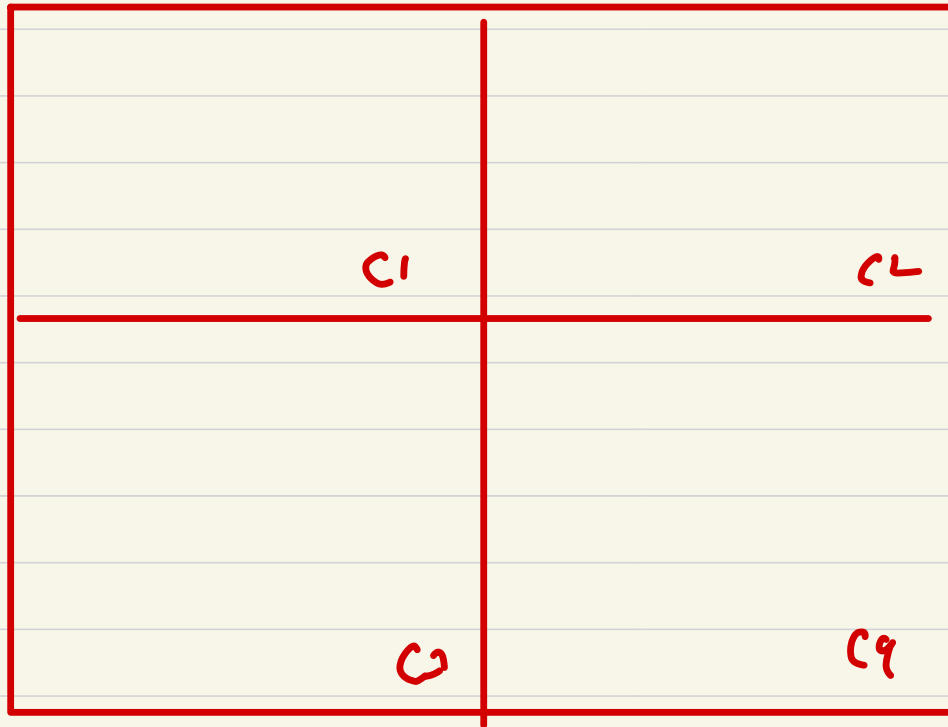
1) Call Stack → func

2) Kernel Stack

3) Heap Memory ← object

(There are some storage areas)

Quadrant



(Content Switching)

Single Core

→ 1 CPU

1 CPU

→ 1 sec → 10^8 instruction



10^3

P1

P2

P3

P4

P5



at any point of time in your code if you call
a funcⁿ a new entry will be added in the
call stack.

The moment you hit return it removes the entry
from call stack.

every entry added in the call stack by the funcⁿ call is called as Stack Frame

(Note) if we do not return anything manually from the funcⁿ the OS will automatically return undefined.

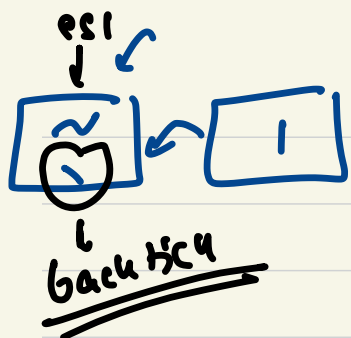
in functions we can define default parameter values.
if we do not manually pass anything to the
parameter it will automatically pick the default
value or if we passed something then it will
take the passed value.

In JS there are a lot of internal built func

↳ Math → object

{
 abs: f()
 min: f()
 :
 :
 :
}

console.log (x, y, z, 14, km)



text



string



→ "abcd....." → double quote

→ '~~~~~' → single quote

→ '~::~' → backtick

! Rajo said "where are you going?" !

! I don't have many !

String interpolation / templated string

$x = \underline{\underline{100}}$ $\underline{\underline{11}}$ $\underline{\underline{12}}$

$S =$ Value of x is $\underline{\underline{100}}$

\hat{v}_i

value of x is $\$[x]$