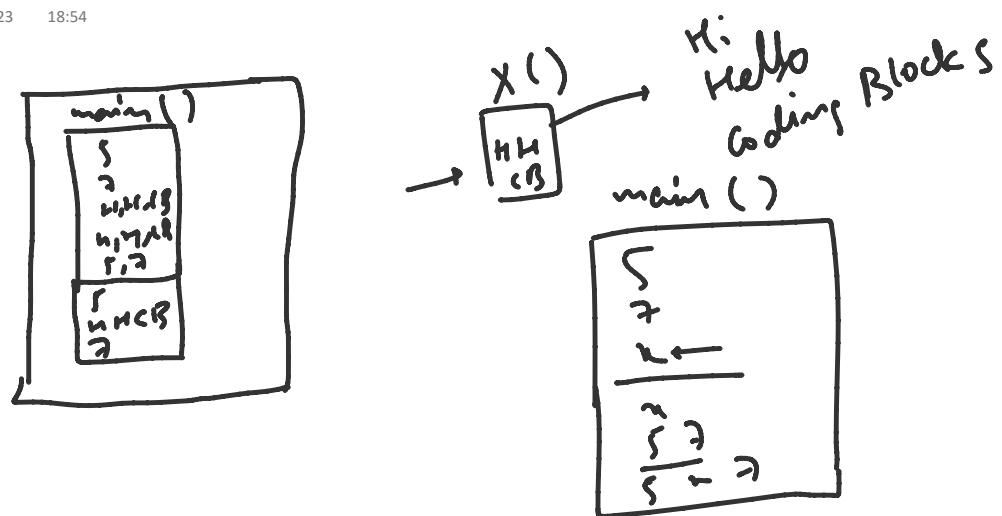


Functions

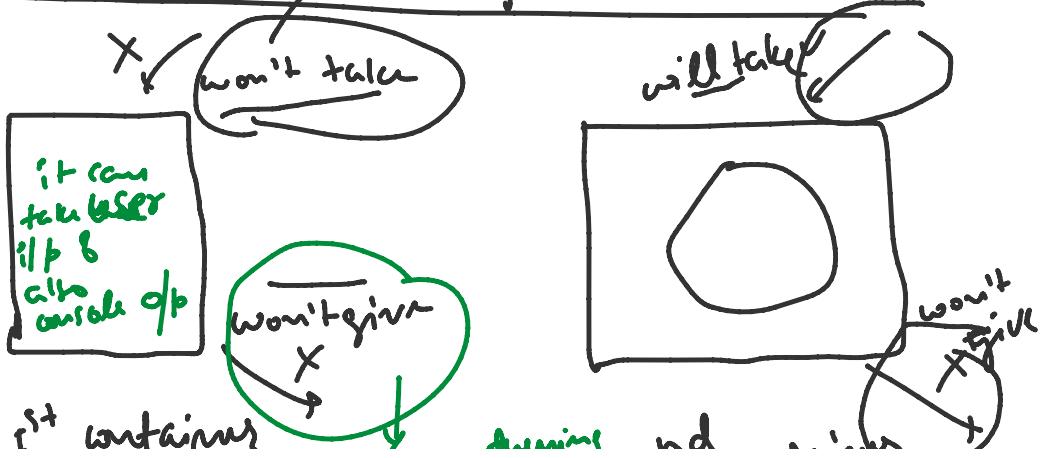
16 June 2023 18:54



```
int main() {  
    arr i/p  
    // Bubble sort.  
    ↓  
    o/p arr1  
    arr2 i/p  
    Bubble sort  
    o/p arr2
```

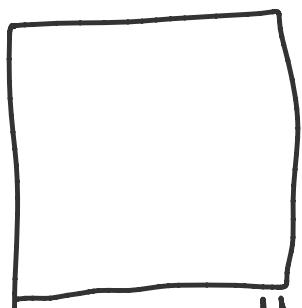
?

they are not given by user, they are given by caller.



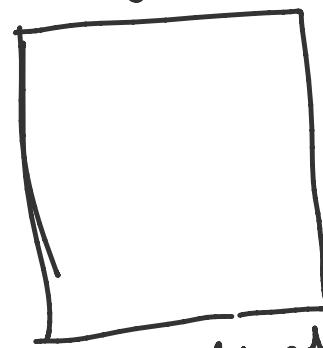
it contains
we are talking about returning 2nd contains
to the caller.

3rd type: won't take



but will give something back.

it will take value



it will also give us something in return.

Syntax for functions.

type of value it will give.

return type

function | can give (values it can take)

tasks it is designed
to perform

return value /

y

- L returning .

if function is not returning
any thing (~~return~~) / (return;)

then its return type is called
void;

→ int, char, float, double }

write a function that checks whether
a given no. is prime or not.

void function(int a) → takes a number as
input.

You have to take input 5 times
from user:

factorial

$$5! = \underline{5 \times 4 \times 3 \times 2 \times 1} = 120$$

$$6! = \underline{6 \times 5 \times \dots \times 1} = 720$$

write a function to calc. $N C R$
user will take input

write C function
 n, r you will take input
 from user.

$${}^n C_r = \frac{n!}{r!(n-r)!}$$

val

$${}^n C_r = {}^n C_{r-1} \left(\frac{n-r+1}{r} \right)$$

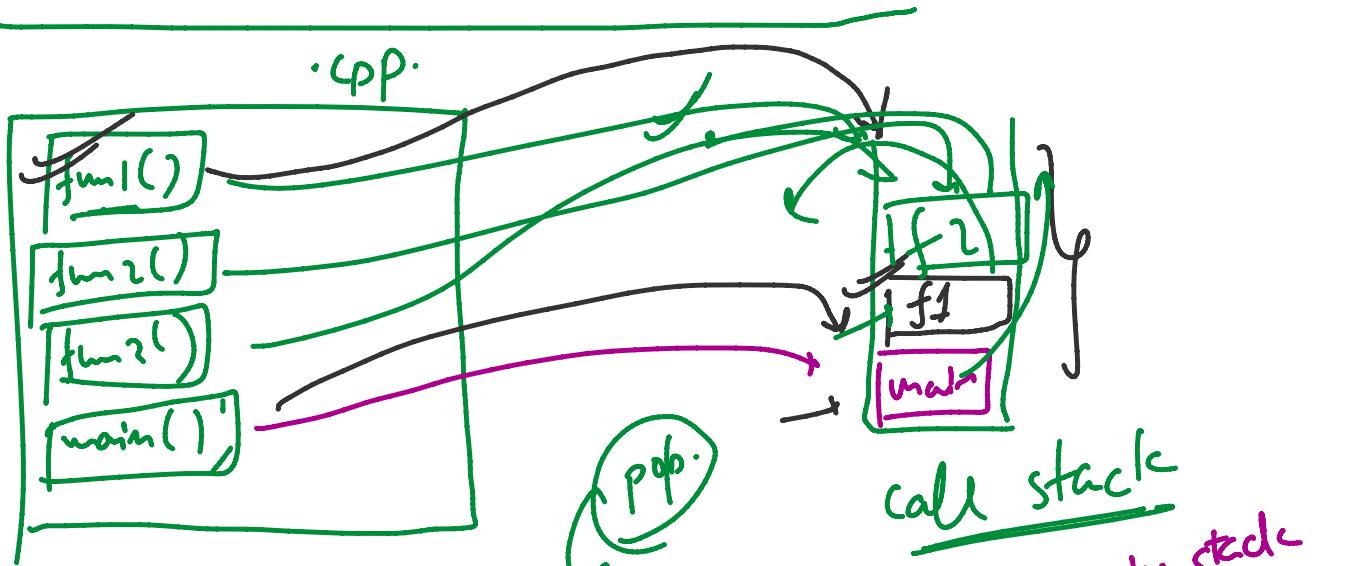
$$\frac{5!}{2! 3!} = \frac{5 \times 4 \times 3!}{2 \times 1 \times 3!} = 10$$

$${}^{n+1} C_{r+1} = {}^n C_r + {}^n C_{r+1}$$

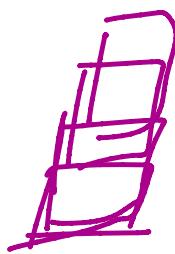
$${}^n C_r = {}^{n-1} C_{r-1} + {}^{n-1} C_r$$



$$z_{C_1} = z_{C_0} + z_{C_1}$$



take out one by
one each book
about 2.



stack

book stack
library stack

pop



call stack

if I want

choose

LIFO/FIFO

→ last in first out
→ first in last out

