

Q.) (Mask)

5 →

~5 →

(7 bits)

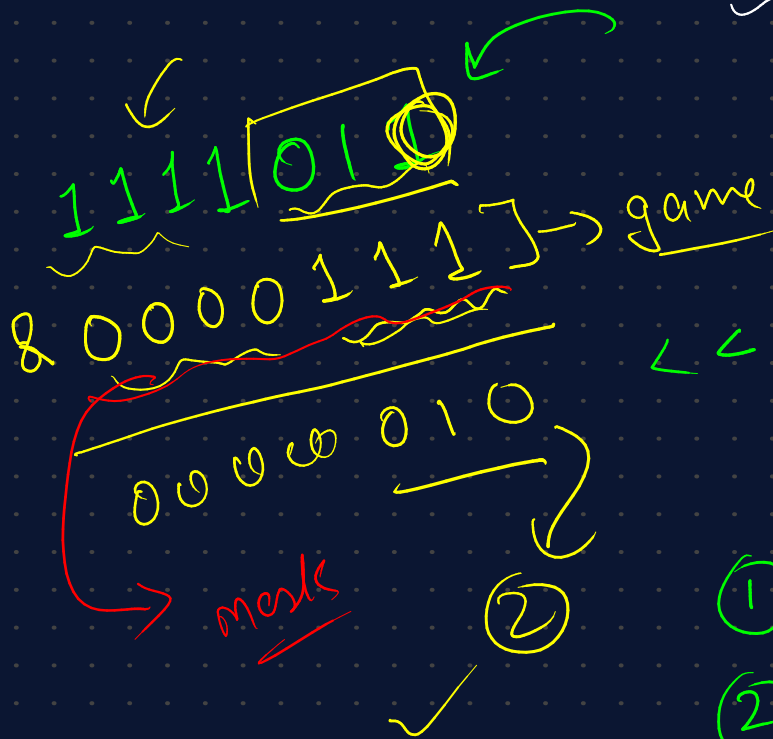
0000101



111

Are me
Rhea

Hataye kore?



①

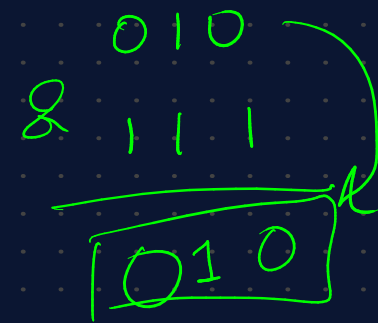
②

③

01

011

mask



header → compiler pre configure

Local → INT_MIN, INT_MAX } → <limits.h> } ^{defined}

✓ Same

cout << } → <iostream>
cin >>

(Switch case) :-

```
if ( )  
{  
    ✓  
}  
  
else ( )  
{  
    ✓  
}
```

↙ variable
Switch () {

case - : Kam Karwana
=====

case - : Kam Karwana
=====

default : Kam Karwana
=====

switch (age) // age ke similar type : integer, character

```
{
  case 18: const
    cout << "Age is 18" << endl;
    break;

  case 1:
    cout << "Age is 1" << endl;
    break;

  case 12:
    cout << "Age is 12" << endl;
    break;

  default:
    cout << "This is default case" << endl;
}
```

```
cout << "Enter fav character: ";
cin >> ch;
```

```
switch (ch)
```

```
{
  case 'A':
    { cout << "Ch is \"A\"" << endl; }
    break; → switch se bahar

  case 'b':
    cout << "Ch is 'B'" << endl;
    break;

  default:
    cout << "This is default case" << endl;
}
```



while (n) {

Switch (const) {

return 0;
int value

error
no

OS

(Code dekho)



Case ①

break;

Case ②

break;

Switch se bahar ☒

while ☒ → aatac gya

Switch se bahar

while se bahar



~~break;~~

return;

Hw (70) → mini calculator
(71) → Total amount

mini calculator
user input (a, b, operator)

↓
"Sum of value of a value of b = Ans
screen

(Switch case ✓)

+
-
*
/
%

(Total amount)

Switch case

user input no → 1350
↓ fulfill
krne ice liye

Screen

10 - 100 Rs note
20 - 50 Rs note
0 - 20 Rs note
" So on.

No

Kitne

100 Rs note?

50 Rs ?

20 Rs ?

10 Rs

and 1 Rs Coin?

$$\frac{1350}{100}$$

(function)

Print
(1 to n)

```
for (int i = 0 ; i < n ; i++)  
{  
    cout << i + 1 ;  
}
```

code 😊

(Print 1 to n)



for loop
200



Smart

(i < 200)

1 2 200

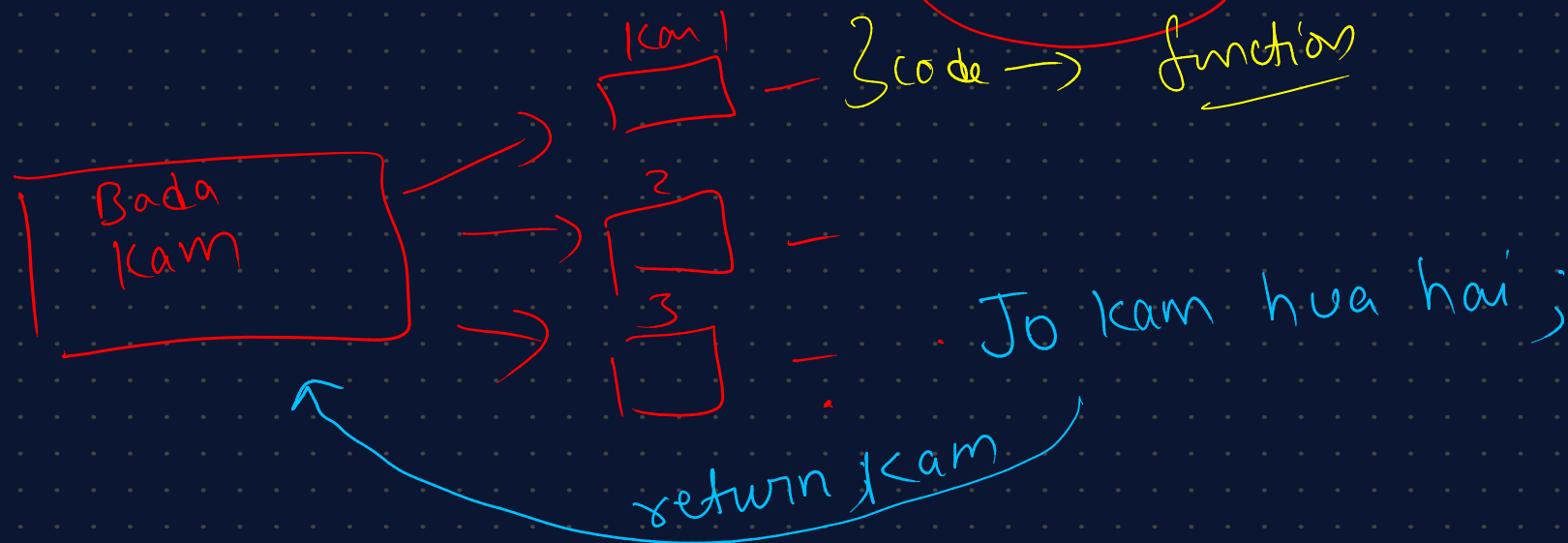
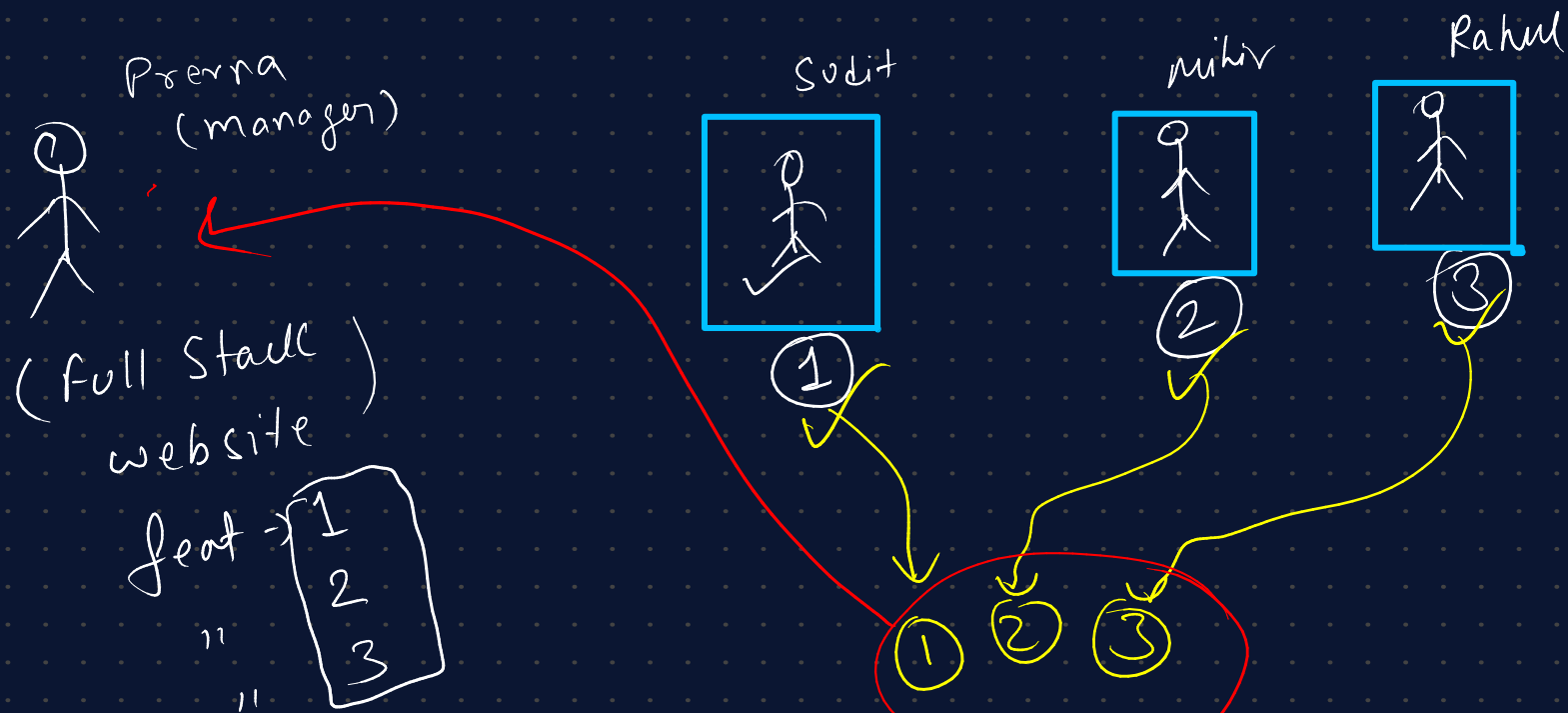
(5 bar) same 1 to n print kro, mgr

Alag Alag Jagah par;



Ab toh fs gye → Likhna pdega
(200 times) bar bar ;

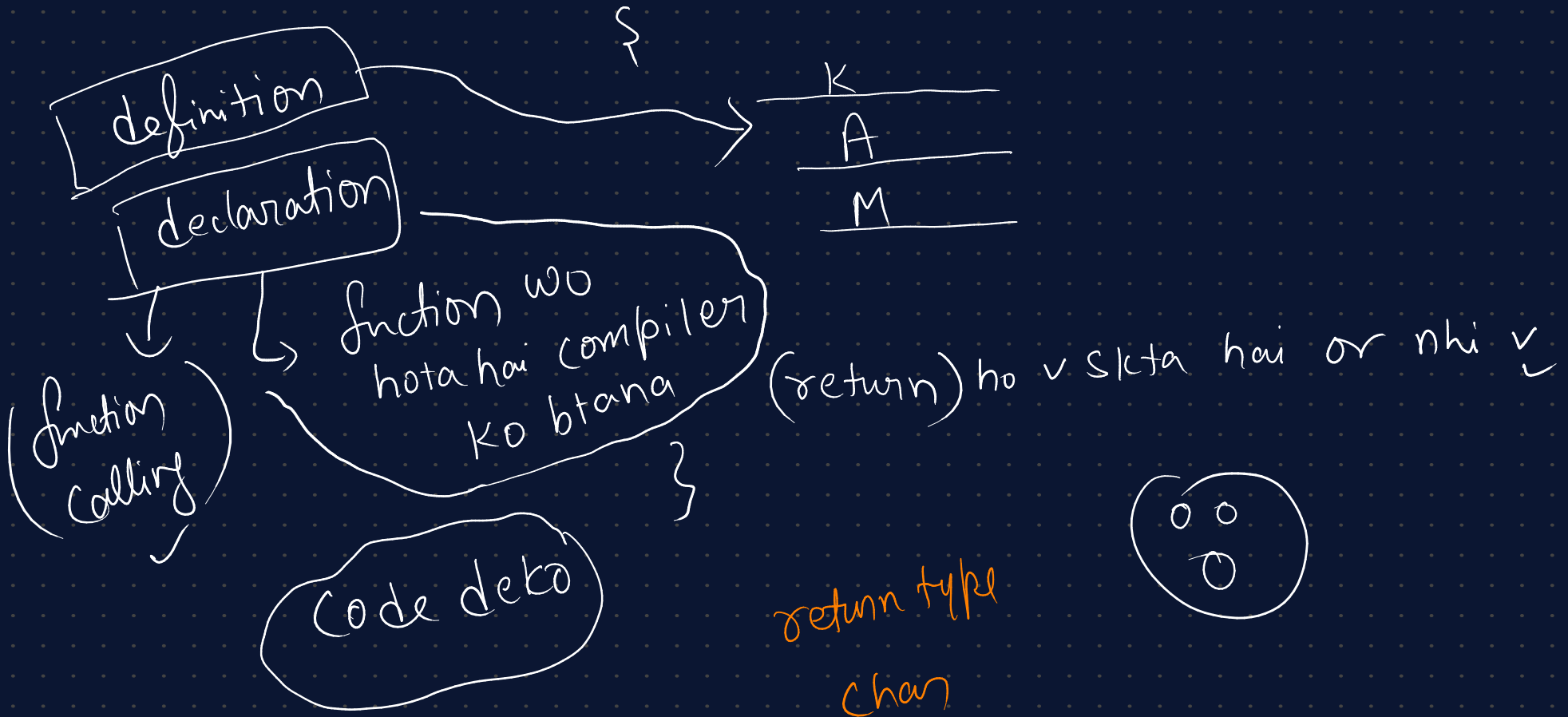




function (Syntax)

return type of function

Name of function (Arguments / parameters)



return type

char
float
int
void
boolean




```
int printSum(int a, int b)
{
    return a + b;
}
```

```
int main()
{
    int result = 0;
    result = printSum(2,3);
    cout << result;
    return 0;
}
```

copy

Continue
(next clam)

function → 1 kam
1070

return type --- ~

NO of money

100 ? → Case 1 :

```

int main()
{
    int n;

    cin >> n;
    switch (n) ✓
    {
        case 1:
            cout << "No of 100 rs Note: " << n / 100 << endl; ✓
            n /= 100; ✓
        case 2:
            cout << "No of 50 rs Note: " << n / 50 << endl; ✓
            n /= 50;
        case 3:
            cout << "No of 20 rs Note: " << n / 20 << endl; ✓
            n /= 20;
        case 4:
            cout << "No of 10 rs Note: " << n / 10 << endl;
            n /= 10;
        case 5:
            cout << "No of 1 rs Note: " << n / 1 << endl;
            n /= 1;
    }

    return 0;
}

```

break;

FUNCTION WILL CONTINUE . . .

we now know, that what is definition, declaration and calling in terms of Function!!

Let's learn about types of functions, parameters, arguments, pass by value

void \longrightarrow Kuch return X

return \longrightarrow Kuch $\begin{matrix} \rightarrow \text{int} & \text{double} \\ \rightarrow \text{char} & \text{ptr} \\ & \text{array} \end{matrix}$

Parameter ☒

Parameter ☐

\longrightarrow Koi Parameter accept krta hai.

\longrightarrow Koi Parameter ☐

① void printname() {
 cout << "Hi, this is jerry" ;
}

② \swarrow Argument/Parameter
 \searrow Definition Jaha hota (-)
 \searrow calling ke time pe jab value pass krte hai.

②/③

int Addme(int a, int b) {
 int sum;
 sum = a + b;
 return sum;
}

Definition

Parameter

main()
{

~~Addme()~~;
Addme(4, 2);
}

Argument
of function.

modularity → Reuse of code
(Even odd) ☒ function
↑ use library

(A to Power B)

A → Input
B → Input

(Logic)

a^b

$2^3 \rightarrow 2 \times 2 \times 2$

return (A^B) → calculate

Brute force

① $a \times a$
 $a \times a$
 $a \times a$
cond

$2^5 \rightarrow 2 \times 2 \times 2 \times 2 \times 2$
 a^b times ≤ 5

A function \rightarrow even
odd \rightarrow isEven (int num)

```
main ( )  
{  
  int value;  
  isEven (value);  
}
```

catch
(copy)

int ~~return~~ factorial ()

\rightarrow print \checkmark
factorial value de do

$$\underline{nCr} = \frac{n!}{r! \times (n-r)!} \quad \left. \vphantom{\frac{n!}{r! \times (n-r)!}} \right\} \rightarrow \text{Homework ?}$$

Reqn:- $\left[\begin{array}{l} \text{int } nCr (\text{----}) \\ \text{int } factorial (\text{---}) \end{array} \right.$

(1 to n) \rightarrow Print
 \hookrightarrow using function \rightarrow (Hw)

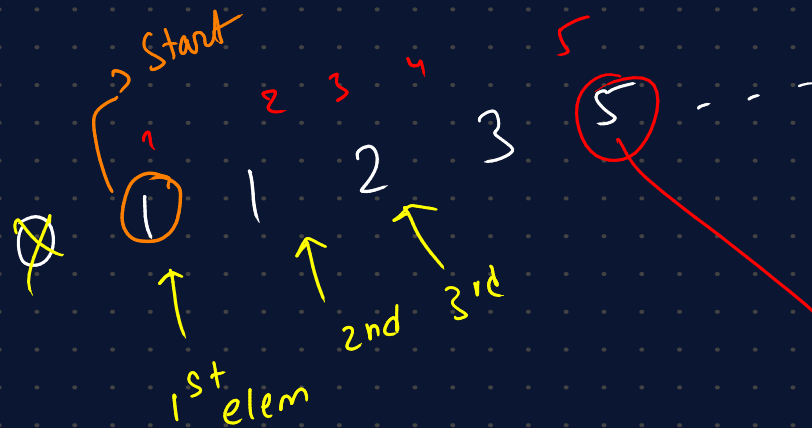
function(2 input a, b)

() Total no of set bits

bits(a) + bits(b)

return ✓

() print ✓



nth term

$\downarrow \downarrow$ \Rightarrow (5)

function(n)

() output

(5) ✓

Array } Basic of DSA
String }



example :- Aon

String Basic

↳ Input ek String



Input

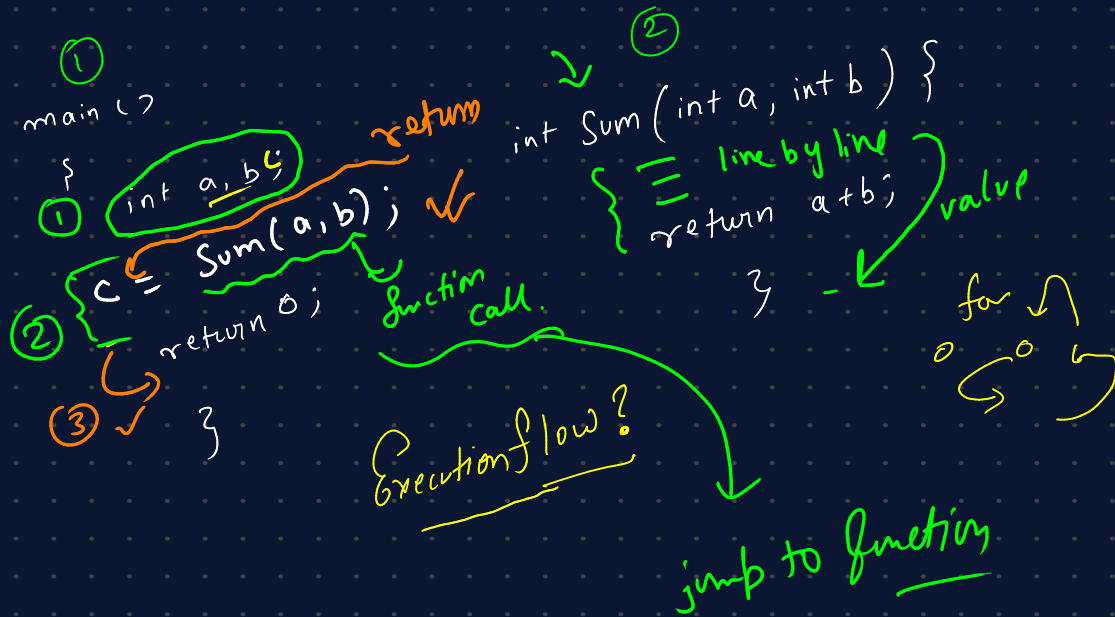
{ we are very happy and we
look good.

(Question)

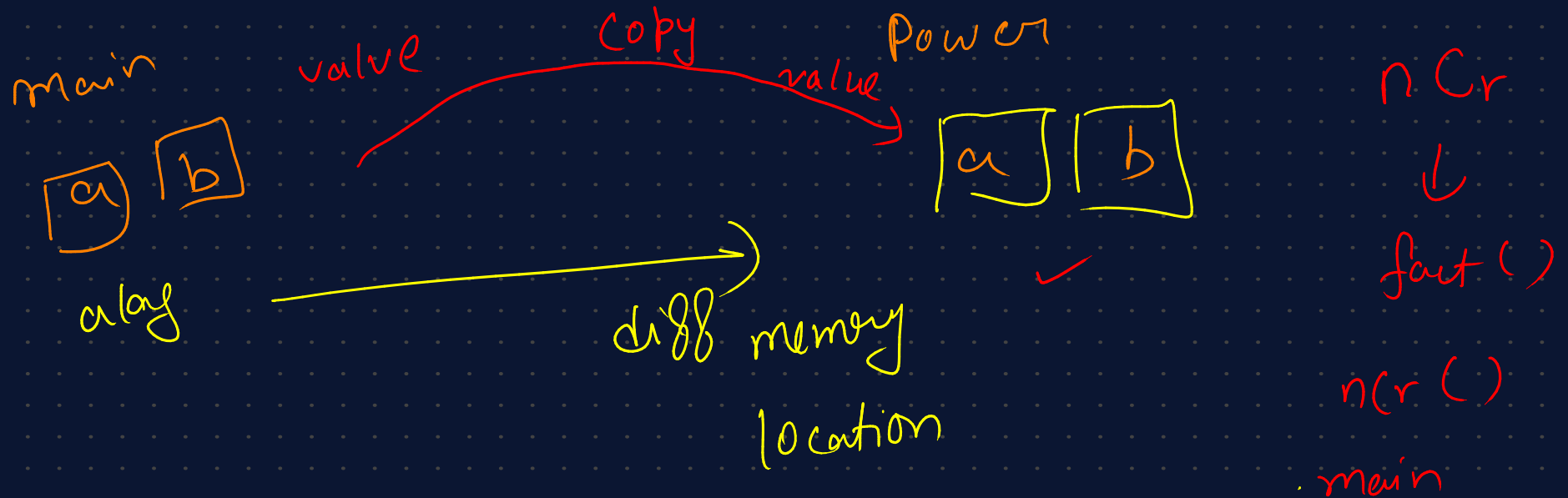
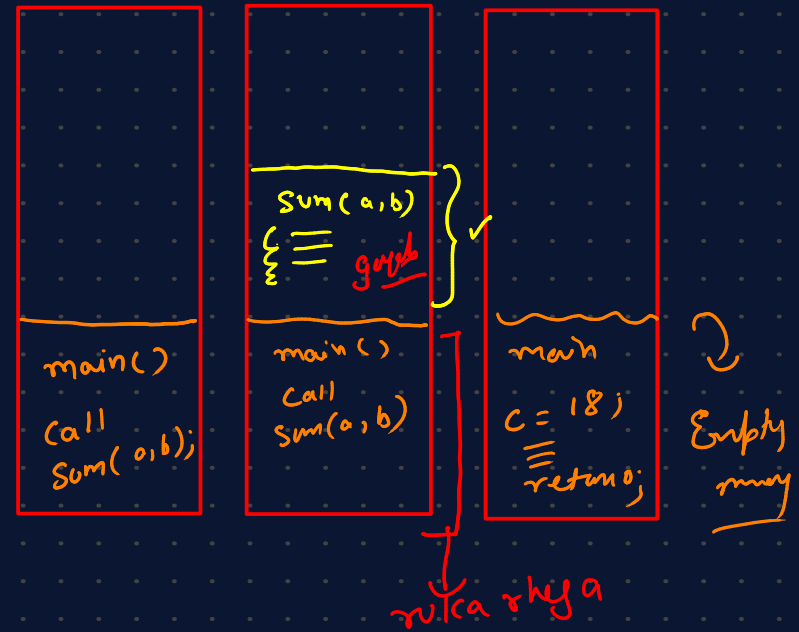
give inp a String
find out the
frequently used
word.

output { we, and

function :- (call stack)



Memory



$nCr \rightarrow$

①
main ()
{
 nCr () ;
}

②
 nCr
{
 fact () ;
}

③
fact ()
{
 fact
}

(function 1chtm)

