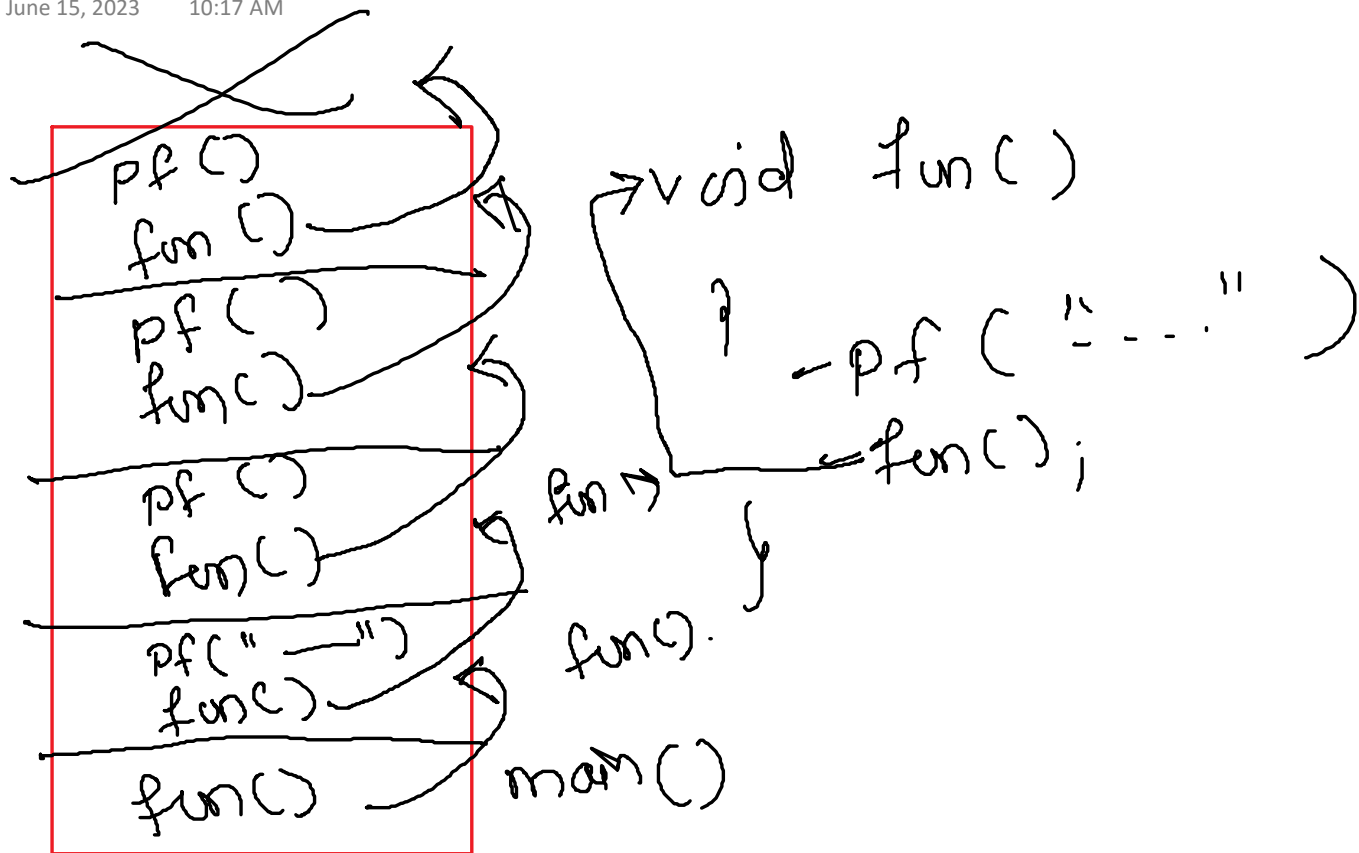
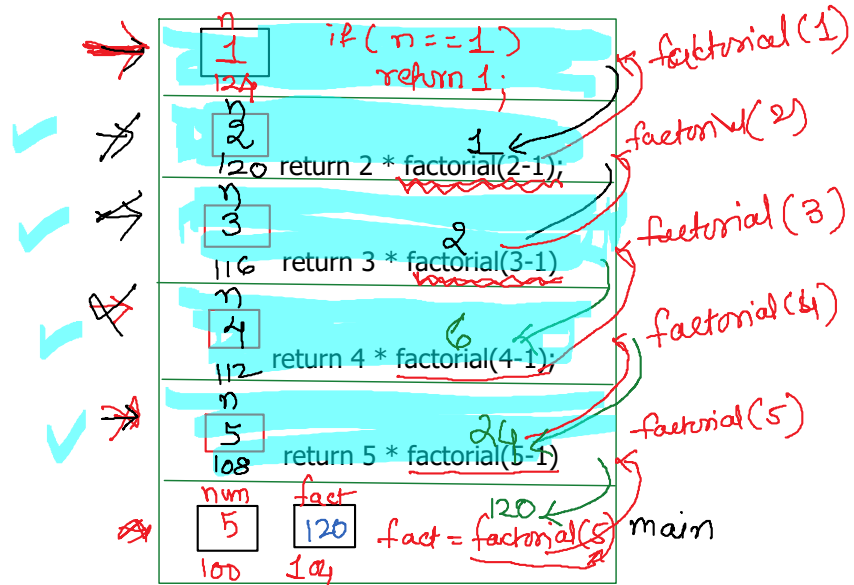
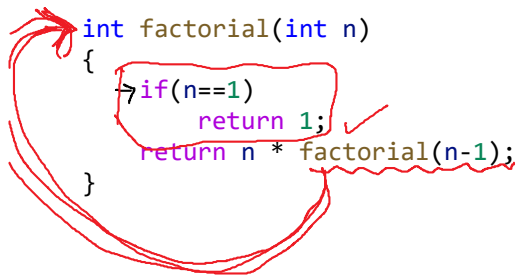


Recursion  
Basics of pointer  
Pass by address  
Array



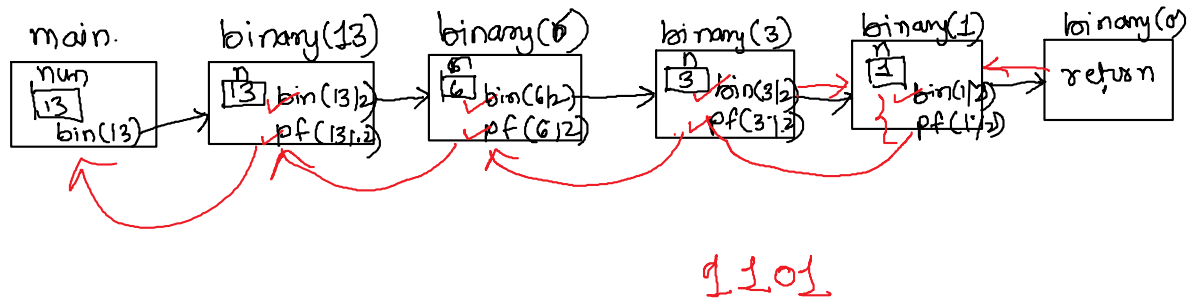
```
int factorial(int n)
{
    if(n==1)
        return 1;
    return n * factorial(n-1);
}
```



2	13	1
2	6	0
2	3	1
2	1	1
		0

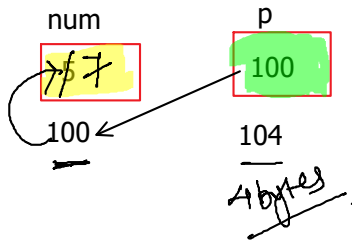
```
void binary(int n)
{
    If(n==0)
        return;

    binary(n/2);
    printf("%d",n%2);
}
```



```
int binary(int n)
{
    if(n==0)
        return 0;

    return binary(n/2) * 10 + (n%2);
}
```



\*100

Num = 5  
&num = 100

P = 100  
&p = 104

\*p

p = 100  
\*100 = 5

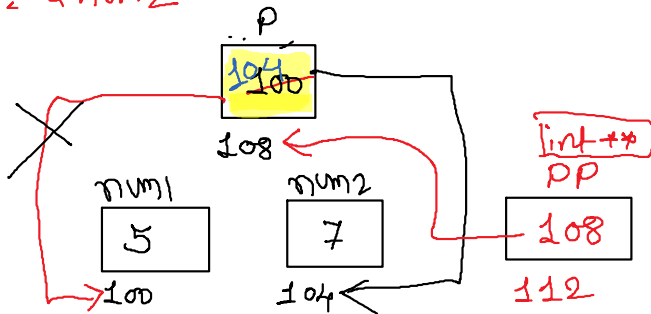
\*p

\*p = 7

p = green  
\*p = yellow

p = &num1

p = &num2



pp = &p

&pp = 112

pp = 108 - add of ptr to int

\*pp = \*108 = 104 add of int

\*pp = 104 = 7 int

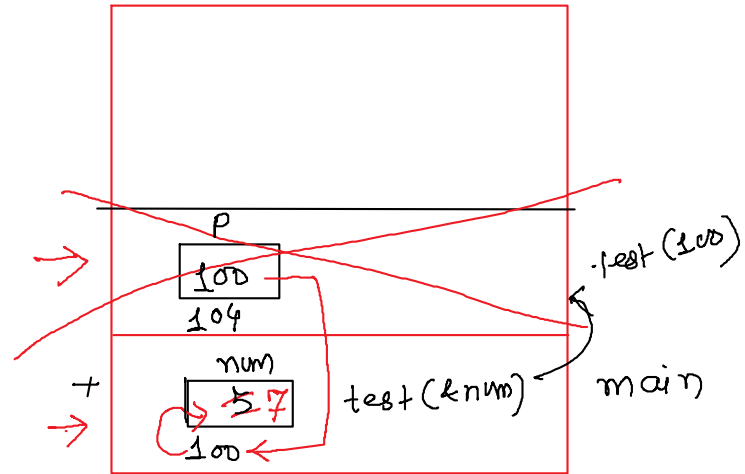
\*(\*pp) = 7

```

int main()
{
    ✓int num=5;
    ✓printf("before num = %d \n",num); //5
    test(&num);
    printf("after call num = %d \n",num);
}
void test(int *p)
{
    printf("*p= %d \n",*p); // 5
    *p = 7;
    printf("*p= %d \n",*p); // 7
}

```

$*p = 7$   
 $*100 = 7$



int arr[5];

read  
only

arr  
100  
100

arr[0]	arr[1]	arr[2]	arr[3]	arr[4]
0	1	2	3	4
11	22	33	44	55
100	104	108	112	116

← indexes  
← int values at respective index location.  
← addresses

array's base add will remain fix