**My Sir G Pointer**

Pointer is a variable that contains address of another variable.

Pointer always consume 2 bytes in memory because it contains memory address ,address always integer.

**Address of Operator:**

1. & user for address
2. This is unary operator,means it have only one operands.
3. Opearands must be the name of varible.
4. & known as referencing operator.

**Indirection Oprators:**

* 1. \*Known as indirection operator
  2. It is known as dereferencing operator.
  3. It is unary operator.
  4. It takes an address of operands
  5. \*returns the content/container whose address is its argument.

**Notes:**

1. We can not store anything in &num because it contains address of variable block.
2. A data type variable contains address of its matched data type not another data type.

**Example:-**float \*j contains only float data type variable address.

**\*j**

J is not an ordinary variable like another integer variable.

It is a variable which contains the address of another varible

**\*&j - Always return values of j.**

**Nth Level of Pointer:** Means Pointer consume address of other pointer.

x p q r

**5**

2000

**1000**

3000

1000 2000 3000 4000

Int x,\*p,\*\*q,\*\*\*r;

\*\*\* level kai hisab se lagta hai jo jitne level ka hoga vo apne se 1 kam level ka address rakhega. 3 vala 2 ka rakhega.

//Level of Pointer.

#include<stdio.h>

void main()

{

int x,\*i,\*\*j,\*\*\*k,\*\*\*\*l;

printf("Enter a Number:");

scanf("%d",&x);

i=&x;

j=&i;

k=&j;

l=&k;

printf("%d\n",\*i);

printf("%d\n",\*\*j);

printf("%d\n",\*\*\*k);

printf("%d\n",\*\*\*\*l);

}

**Pointers Arithmetic:-**

**We can not divide or multiply ,add two address(Only** Substarctio **is possible).**

**We can not multiply an integer or divide to an address.**

**We can add or substract integer to an address.**

**Formula:-**

**Pointer+n=Pointer+sizeof(Pointer data type)\*n**

**Substraction:**

**1020-1000=20; bits=20/2=10 block.**

**2 divide is liye kyuki data integer type ka hai.**