

Assignment - 5

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1] `int Arr[4];`

Arr is an Array which contains 4 elements where each element is of integer datatype.

	0	1	2	3
Arr	1	2	3	4
	100	104	108	112

2] `float Arr[8];`

Arr is an Array, have 8 elements, where each element is of float datatype.

	0	2	3				
	1	2	3	4	5	6	7

Arr is a 2D array which contains 3 rows & 5 columns, where each element is of type integer.

	0	1	2	3	4
0	1	2	3	4	5
1	6	7	8	9	10
2	11	12	13	14	15

$\text{sizeof(Arr)} = 60 \text{ bytes}$
(15x4)

3]

Arr is a 2D array which contains 9 elements with 3 rows & 3 columns, where each element is of datatype double.

	0	1	2
0	1.111	2.222	3.333
1	4.444	5.555	6.666
2	7.777	8.888	9.999

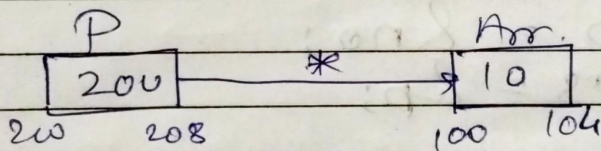
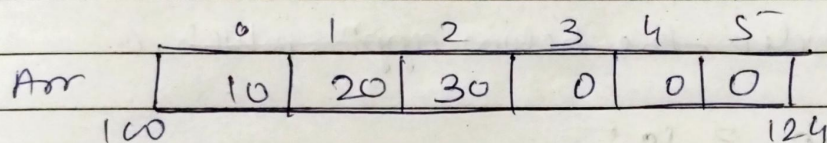
$\text{sizeof(Arr)} = 72 \text{ bytes}$
(9x8)

5) Arr is a 2D Array which contains 3 1D array and 4 1D array respectively where each element is of character datatype.

	0	1	2	3	
0	a	b	c	d	size of (Arr) = 12 bytes (12x1)
1	e	f	g	h	
2	i	j	k	l	

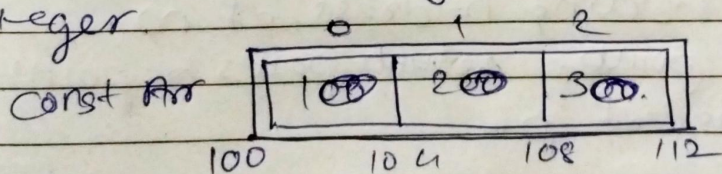
6) `int Arr[6] = {10, 20, 30};`

- 1) Arr is a array which contains 6 elements, each of integer datatype.
- 2) P is a pointer of datatype integer which holds address of



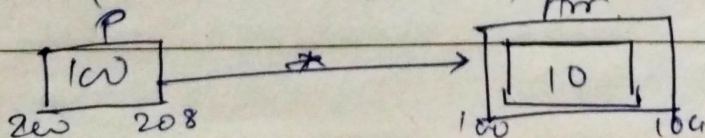
7) `int const Arr[3] = {10, 20, 30};`

- 1) Arr is a constant array of 3 elements of type integer.



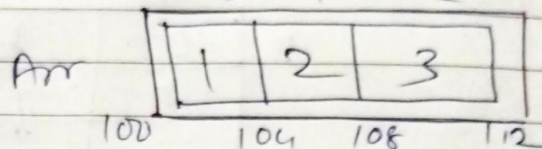
2) `int *p = &Arr;`

- P is a pointer which points to integer datatype and currently holds address of Arr.

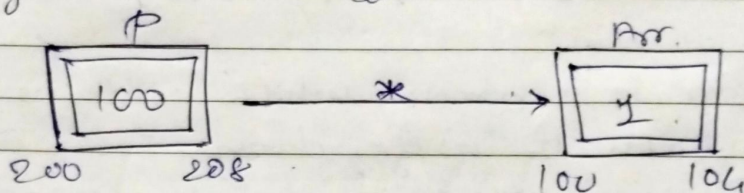


- 8) 1) $\text{int const Arr}[3] = \{1, 2, 3\};$
 2) $\text{int const * const p} = \&\text{Arr};$

1) Arr is a constant array having 3 element of datatype integer.



2) P is a constant pointer pointer to integer datatype storing address of const Arr.



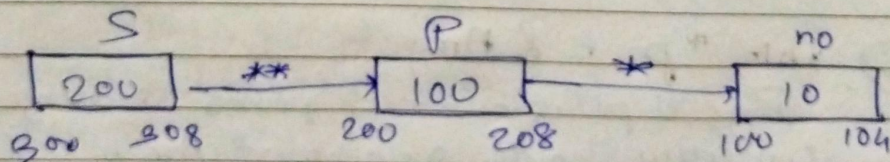
- Consider the below appⁿ, which is

9) $\text{int no} = 10;$
 $\text{int * p} = \&\text{no};$
 $\text{int ** s} = \&\text{p};$

1) no is variable of type integer, initialised with value 10.

2) P is a pointer which pointer to integer, ~~storing~~ holding address of no.

3) S is a pointer which points to pointer & holds address of p.



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1) Char c = '2';

2) char * chptr = &c;

- C is a variable of type character initialized with value 2.
- chptr is a pointer pointing to character, holding address of C.

