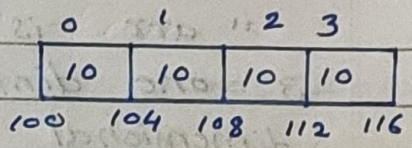
Assignment No. 5

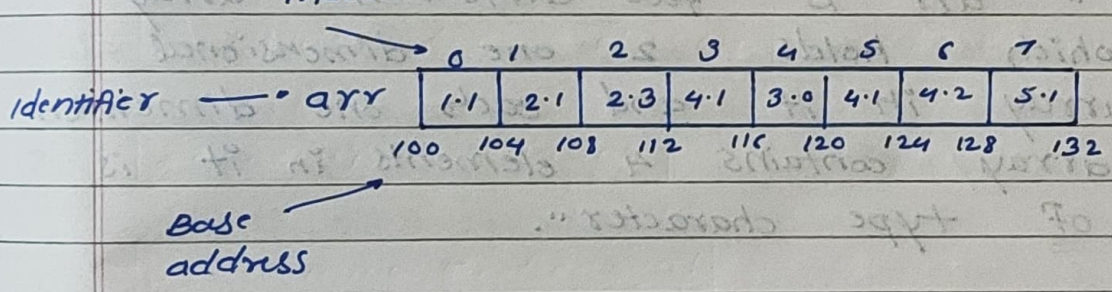
1. int arr [4];



" arr is one dimensional array which holds 4 elements in it is of type integer.".

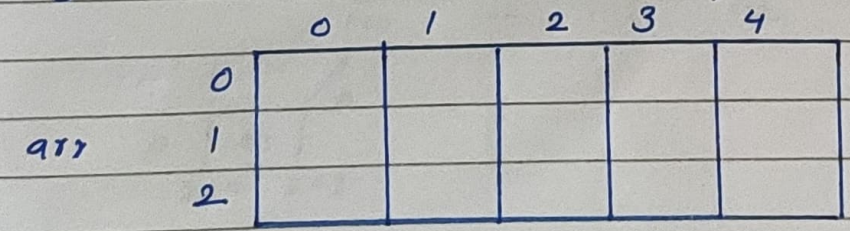
2. float arr[8];

" arr is one dimensional array which holds 8 elements in it is of type float".



3. int arr [3] [5];

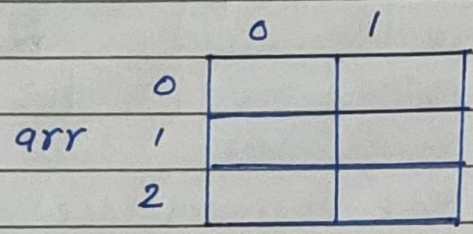
" arr is a two dimensional array which holds 3 one dimensional array & each one dimensional array holds 5 elements is of type integer".



This array is of 60 bytes (15*4)

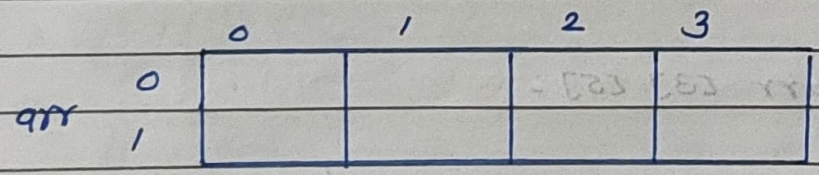
4. double arr [3] [2];

" arr is 2 dimensional which holds 3 one dimensional array & each one dimensional array contain 2 elements in it of type double ".



5. char arr [2] [4];

" arr is two dimensional array which holds 2 one dimensional array in it and each one dimension array contains 4 elements in it is of type character ".

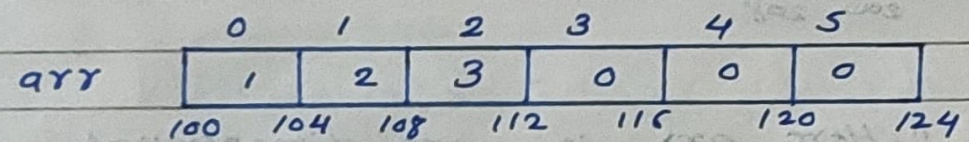


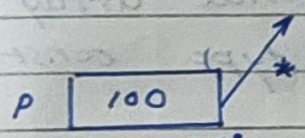
Total size is 8 byte.

6. int arr[6] = {1,2,3};
int *p = arr;

" arr is one dimensional array which holds 6 elements in it is of type integer".

- p is a pointer which holds the base address of arr. [i.e 100].



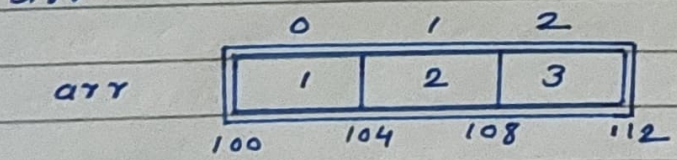


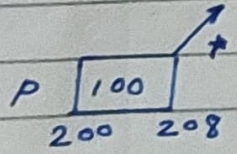
if we print *p then value will be 1.

7. int const arr[3] = {1,2,3};
int *p = arr;

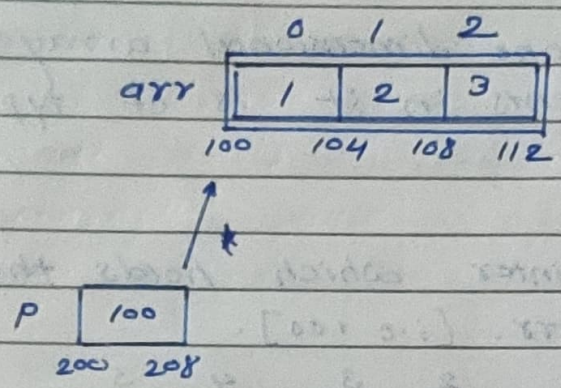
" arr is one dimensional array which holds 3 elements is of type integer".

p is of 8 byte & it holds base address of arr. i.e 100





8. int const arr [3] = {1,2,3};
int const * const p = arr;



" Here arr is one dimensional array which holds 3 elements of type const integer".

pointer p is constant & it holds the address of other constant variable of array.

9.

```
int no = 10;
int *p = &no;
int **s = &p;
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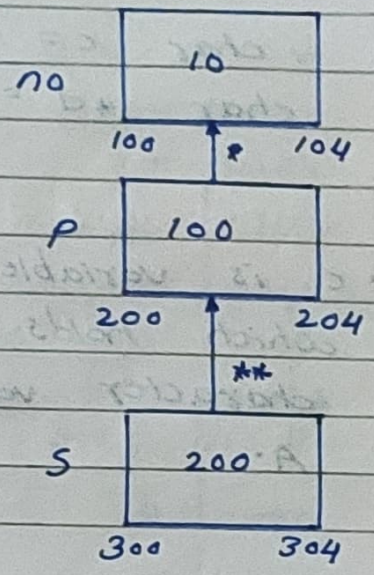
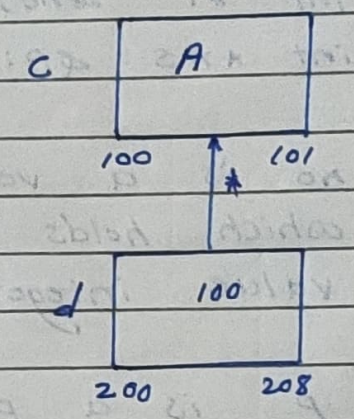


- no is a variable which holds the value integer 10.
- p is a pointer of 8 bytes which stores address of no & can fetch only integer range data from it.

no → 10
&no → 100
*p → 10
sizeof(p) → 8 byte
sizeof(*p) → 4 byte
sizeof(*s) → 4 byte
sizeof(**s) → 4byte

sizeof(no) → 4 byte
p → 100
& p → 200
* s → 100
**s → 10

10. char c = 'A';
char *d = &c;



- c is variable name which holds character value A.

- d is pointer of type char & holds address of c.

c → A
&c → 100
sizeof(c) → 1 byte

d → 100
&d → 200
*d → A
sizeof(d) → 8 byte
Size of (*d) → 1 byte