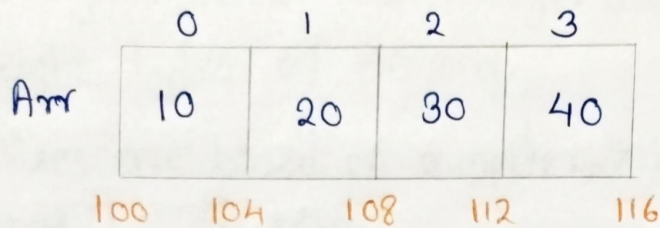


Q1] Write the statement reading which describes below syntax & draw its diagrammatic layout.

Q1] `int Arr[4];`

Syntax Arr is an Array which contains four elements where each element is of type integer.

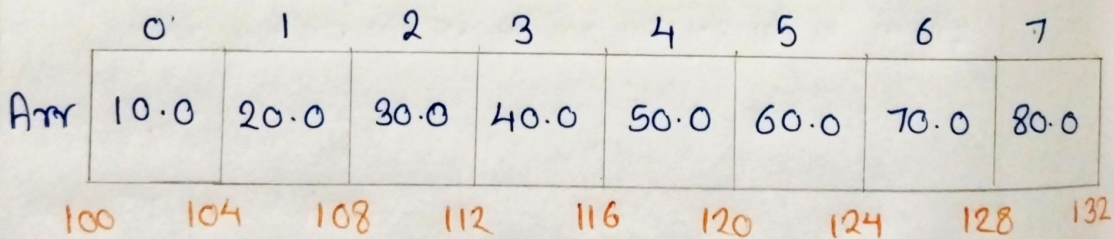
Layout



Q2] `float Arr[8];`

Syntax Arr is an Array which contains eight elements where each element is of type float

Layout



Q3] `int Arr[3][5];`

Statement Arr is a 2-D Array which contains 15 elements (3 rows & 5 columns) where each element is of type integer

layout

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

(rows)

(columns)

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

100 104 108 112 116 120 124 128 132 136 140 144 148 152 156 160

Q4] double Arr[3][3];

Statement

Arr is a 2D Array which contains 9 elements (3 rows & 3 columns) where each element is of type double

layout

	0	1	2
0	10.0	20.0	30.0
1	40.0	50.0	60.0
2	70.0	80.0	90.0

(rows)

(columns)

	0	1	2	3	4	5	6	7	8
Arr	10.0	20.0	30.0	40.0	50.0	60.0	70.0	80.0	90.0

100 108 116 124 132 140 148 156 164 172



Q5] char Arr [3][4]

Statement Arr is a 2D Array which contains 12 elements (3 rows & 4 columns) where each element is of type character.

Layout

		0	1	2	3	
	0	A	B	C	D	
Arr	1	E	F	G	H	(rows)
	2	I	J	K	L	
		(columns)				

	0	1	2	3	4	5	6	7	8	9	10	11
Arr	A	B	C	D	E	F	G	H	I	J	K	L

100 101 102 103 104 105 106 107 108 109 110 111 112

Q6] int Arr[6] = {10, 20, 30};

int \*p = &Arr;

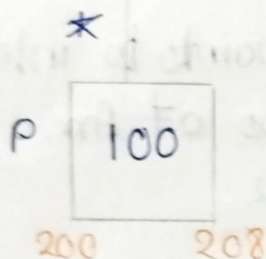
Statement

Arr is an Array which contains 6 elements where each element is of type integer

P is a pointer of type integer which holds the address of Arr.

layout

	0	1	2	3	4	5
Arr	10	20	30	0	0	0
	100	104	108	112	116	120

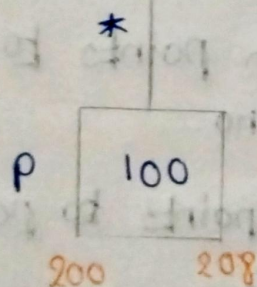
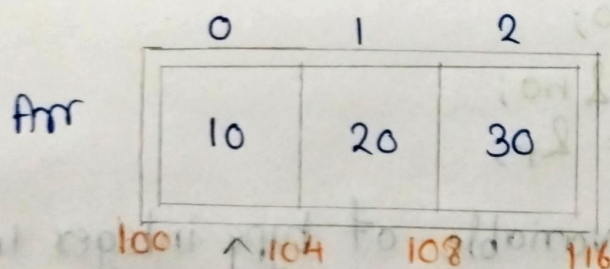


Q1] `int const Arr[3] = {10, 20, 30};`  
`int *p = &Arr;`

statement Arr is an Array which contains 3 constant elements where each element is of type integer.

p is a pointer of type integer which holds the address of Arr.

layout





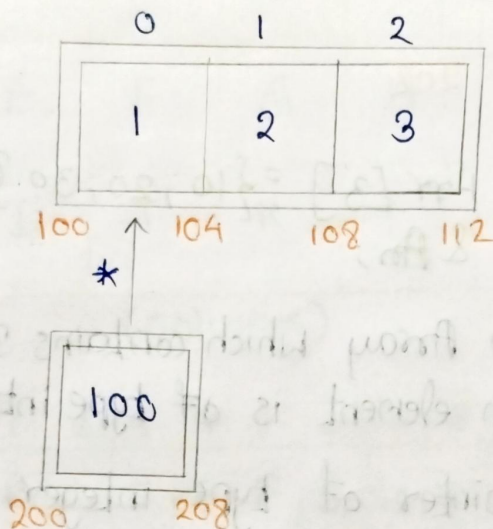
Q8] `int const Arr [3] = {1, 2, 3};`  
`int const * const p = &Arr`

Statement

Arr is an Array which contains 3 constant elements where each element is of type integer.

p is a constant pointer which points to integer constant & it currently holds the address of Arr.

Layout



Q9] `int no = 10;`  
`int *p = &no;`  
`int **s = &p;`

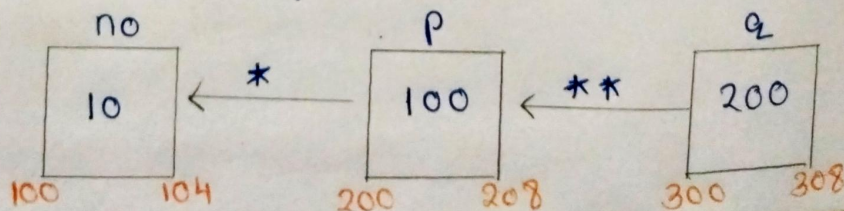
Statement

no is a variable of type integer initialised with value 10.

p is a pointer which points to integer & currently it holds address of no.

s is a pointer which points to pointer & currently it holds address of p.

Layout



§10] char c = 'z';  
char \*chptr = &c;

statement  
ent c is a variable of type character initialised with value z

chptr is a pointer which points to character & currently it holds address of c.

layout

