

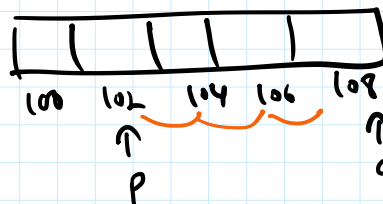
Double Pointer

char *name[] = {"Vijay", "Ajay", "abcdghk", "ab2d"}

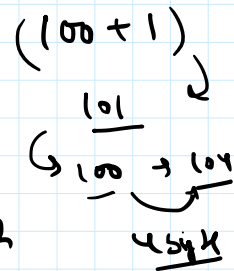
pointer \rightarrow integer

$\&n[0] \rightarrow$
 $n \rightarrow$

$\ast(\ast(100 + 3) + 3)$
 103



$p - q \rightarrow 109 - 102 = 6 \text{ bytes}$

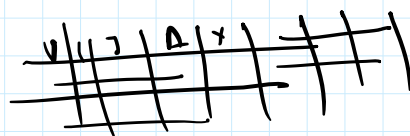


$100 - 102$

100
 $(100 + 1)$
 $102 \checkmark$
 104

$\frac{104 - 102}{2} = \frac{2}{2} = 1$

$a[1][0]$

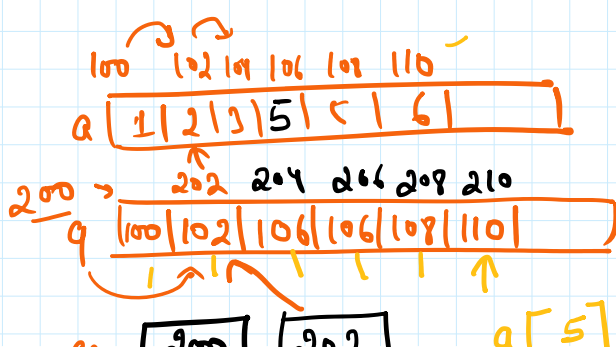


Double Pointers

int a[] = {1, 2, 3, 4, 5, 6}

int *q[] = {a, a+1, a+2, a+3, a+4, a+5}

int **qq = q



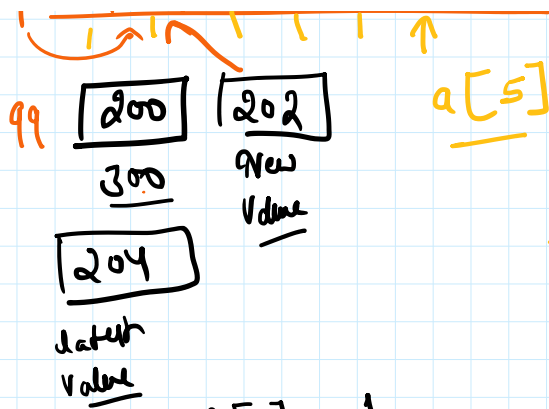
$(100 + 5) = 105$
 \uparrow
 $3(10)$

$a[5] = \ast(a + 5) \rightarrow \ast q[5]$

g"

2

3



$$a[5] = * (a+5) \rightarrow * 9[5]$$

$$\rightarrow 6$$

$$\rightarrow * 110$$

$$\rightarrow * (99+5)$$

$$\rightarrow * (210) \rightarrow * 110$$

Add

$$a[0] = 1$$

$$a = 100$$

$$q[0] = 100$$

$$q = 200$$

$$q[0] = 200$$

$$899 \rightarrow 300$$

$$**q \rightarrow * (* (200))$$

$$\rightarrow * (100)$$

$$\rightarrow 1 = a[0]$$

$$(**q) \rightarrow * (* (q))$$

$$\rightarrow * (* 200)$$

$$\rightarrow * (100)$$

$$\rightarrow 1$$

$$q[0]++$$

$$\rightarrow 200+1 \rightarrow 201$$

$$Q_1 \rightarrow q[0] - q$$

$$\rightarrow 201 - 200$$

$$\rightarrow \frac{2}{2} \rightarrow 1$$

$$Q_2 \rightarrow *q[0] - a$$

$$\rightarrow * (201) - 100$$

$$\rightarrow 101 - 100$$

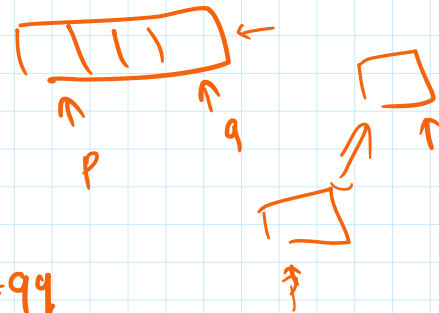
$$\rightarrow \frac{2}{2} \rightarrow 1$$

$$Q_3 \rightarrow **q[0]$$

$$\rightarrow * (* (201))$$

$$\rightarrow * (101)$$

$$\rightarrow 201$$



$$(*q)++ \rightarrow (*q)++ \quad \text{X}$$

$$*q++ \rightarrow *(q++)$$

$$\rightarrow *(q[0]++)$$

$$\rightarrow *(201+1)$$

$$*q++$$

$$z = *q++$$

post inc

++

* →

R-L →



$$\rightarrow * (204)$$

,

$$\rightarrow 99 - 9$$

$$\rightarrow 204 - 200$$

$$\rightarrow \frac{4}{2} \rightarrow 2 \underline{\underline{An}}$$

$$*99 - a$$

$$*(204) - 100$$

$$\rightarrow 104 - 100$$

$$\rightarrow \frac{4}{2} \rightarrow 2 \underline{\underline{An}}$$

$$**99$$

$$*(*(204))$$

$$*(104)$$

3

$$a = i + i$$

$$a = + + i$$

$$\begin{matrix} i + i \\ + + i \end{matrix} >$$

$$(++ *99) \xrightarrow{R-L}$$

$$++ (*99)$$

$$++ (*204)$$

$$104 + +$$

$$\underline{\underline{106}}$$

$$\underline{\underline{0}} \quad 99 - 9$$

$$204 - 200$$

$$\rightarrow \frac{4}{2} = 2 \underline{\underline{An}}$$

$$\underline{\underline{0}} \quad *99 - a$$

$$*(204) - 100$$

$$106 - 100$$

$$\frac{6}{2} = 3 \underline{\underline{An}}$$

$$\underline{\underline{0}} \quad **99$$

$$*(*(204))$$

$$*(106)$$

$$4 \underline{\underline{An}}$$

$$(++ **99) \hookrightarrow ++ (*(*99))$$

$$*(*(204))$$

$$*(106)$$

$$\begin{matrix} 4 + + \\ \underline{\underline{5}} \end{matrix} \underline{\underline{An}}$$

$$6 \underline{\underline{An}}$$

$$\rightarrow 99 - 9$$

$$\rightarrow 204 - 200$$

$$\rightarrow \frac{4}{2} = 2 \underline{\underline{An}}$$

$$\rightarrow *99 - 9$$

$$\rightarrow *(204) - 100$$

$$\rightarrow 106 - 100 \rightarrow \frac{6}{2} = 3 \underline{\underline{An}}$$

$$**99$$

$$\rightarrow *(*(204))$$

$$\rightarrow *(106)$$

$$\rightarrow 5 \underline{\underline{An}}$$

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