

## Pointers and arrays in C

```
int main(){
```

```
    int T[4]={4,3,2,1};
```

```
    int *a,*b;
```

```
    int x=10,y;
```

```
    int **Z;
```

```
    a=&x;
```

```
    b=a;
```

```
    y=*b;
```

```
    a=&T[1];
```

```
    b=T;
```

```
    a++;
```

```
    b[1]=0;
```

```
    a=NULL;
```

```
    Z=&b;
```

```
    **Z=8;
```

```
    return 0;
```

```
}
```

RAM map

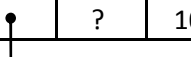
T[0]	T[1]	T[2]	T[3]					
4	3	2	1	?	?	?	?	?

T[0]	T[1]	T[2]	T[3]	a	b			
4	3	2	1	?	?	?	?	?

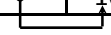
T[0]	T[1]	T[2]	T[3]	a	b	x	y	
4	3	2	1	?	?	10	?	?

T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	?	?	10	?	?


T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	?	10	?	?



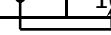

T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	•	10	?	?



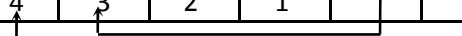
T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	•	10	10	?



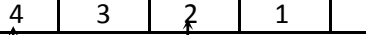
T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	•	10	10	?



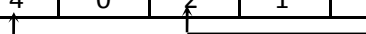
T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	•	10	10	?




T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	•	•	10	10	?




T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	0	2	1	•	•	10	10	?



T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	NULL	•	10	10	?



T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
4	3	2	1	NULL	•	10	10	•



T[0]	T[1]	T[2]	T[3]	a	b	x	y	Z
8	3	2	1	NULL	•	10	10	•

