

Pointer (2A)

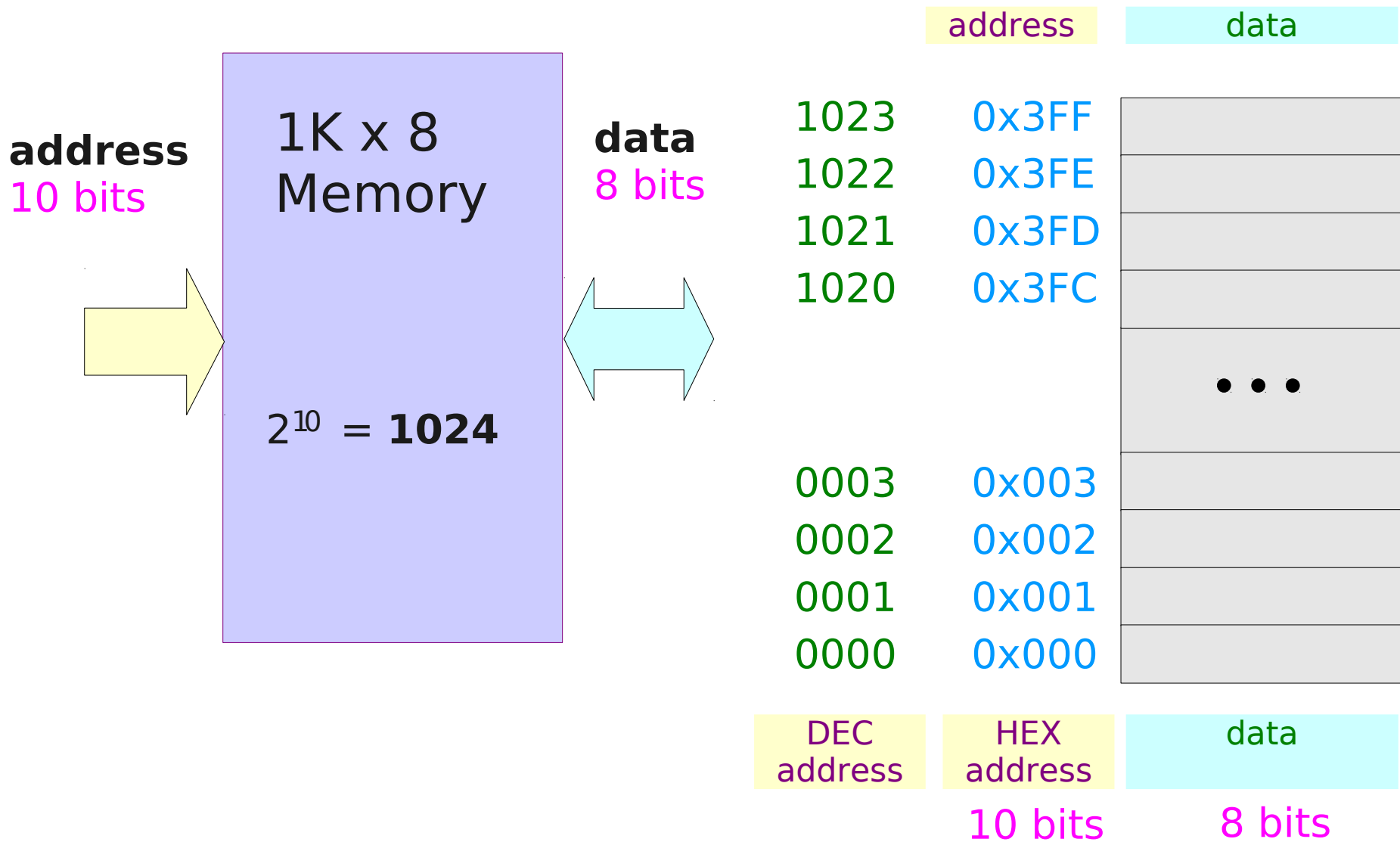
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Address and Data in a Memory



Variable

```
int a;
```

a can hold an *integer*

address

data

&a

a

```
a = 100;
```

a holds an *integer* 100

address

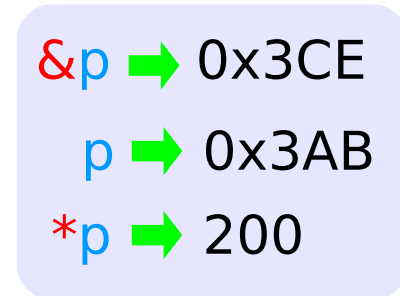
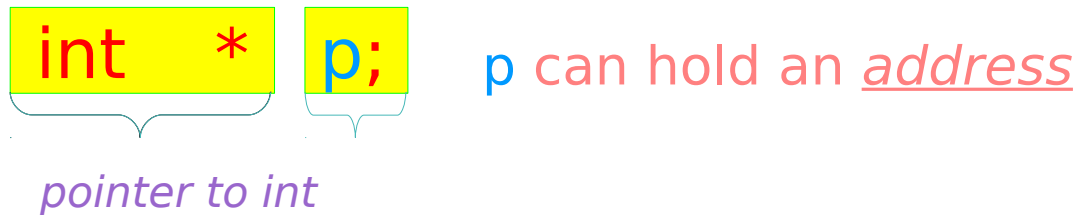
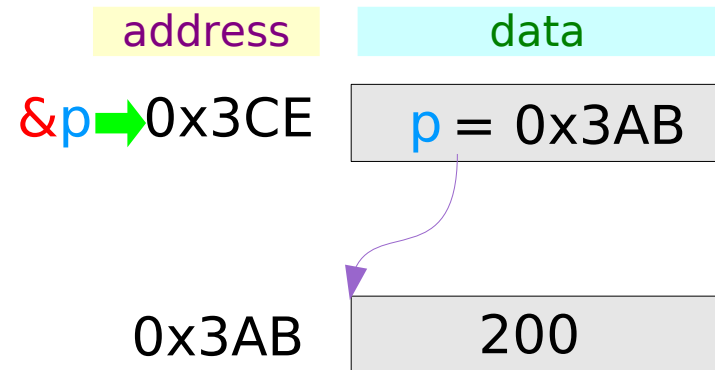
data

&a

a ← 100

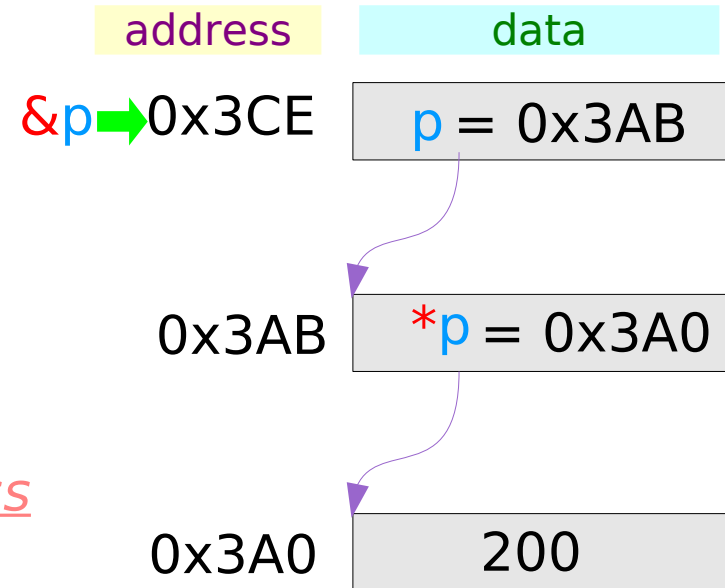
Pointer Variable

```
int * p;  
  
p can hold an address
```



Pointer to Pointer Variable

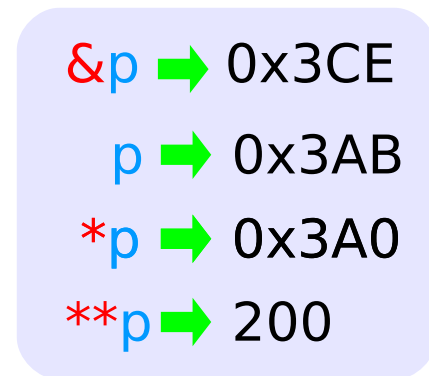
```
int ** p;  
  
p can hold an address
```



```
int ** p;  
  
p can hold an address  
  
pointer to pointer to int
```

```
int * *p;  
  
*p can hold an address  
  
pointer to int
```

```
int **p;  
  
**p can hold an integer
```



Array of Pointers

2-d Array

References

- [1] Essential C, Nick Parlante
- [2] Efficient C Programming, Mark A. Weiss
- [3] C A Reference Manual, Samuel P. Harbison & Guy L. Steele Jr.
- [4] C Language Express, I. K. Chun