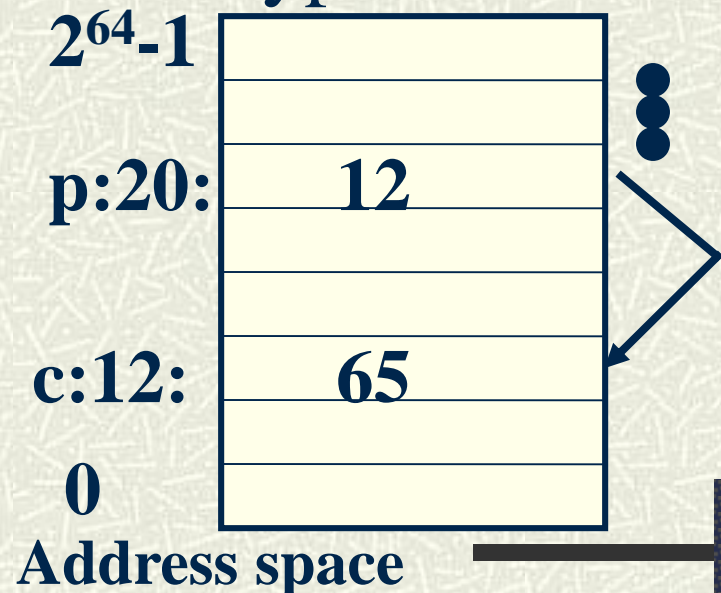


# Memory and Pointers

- # A pointer is a variable that contains an address in memory.
- # In a 64 bit architectures, the size of a pointer is 8 bytes independent on the type of the pointer.

```
Char c = 'A'; //ascii 65
```

```
char * p = &c;
```



# Ways to get a pointer value

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## 1. Assign a numerical value into a pointer

```
Char * p = (char *) 0x1800;
```

```
*p = 5; // Store a 5 in location 0x1800;
```

Note: Assigning a numerical value to a pointer isn't recommended and only left to programmers of OS, kernels, or device drivers

# Ways to get a pointer value

## 2. Get memory address from another variable:

```
int *p;
```

```
int buff[ 30];
```

```
p = &buff[1];
```

```
*p = 78;
```

**220:**  
**buff[29]:216:**



**buff[1]:104:**

**buff[0]:100:**

**P: 96:**

