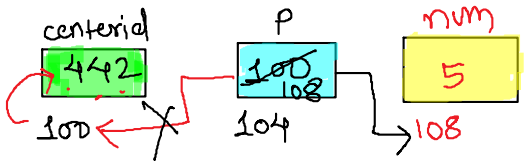
Friday, May 19, 2023 7:58 AM

Agenda
Qualifier - const
Basics of String
String library functions

Friday, May 19, 2023 7:58 AM

int *p = &centeroid

const int *p = &centeroid;

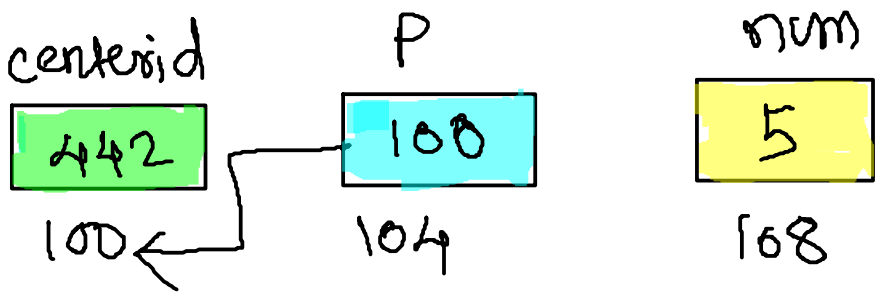


p = #

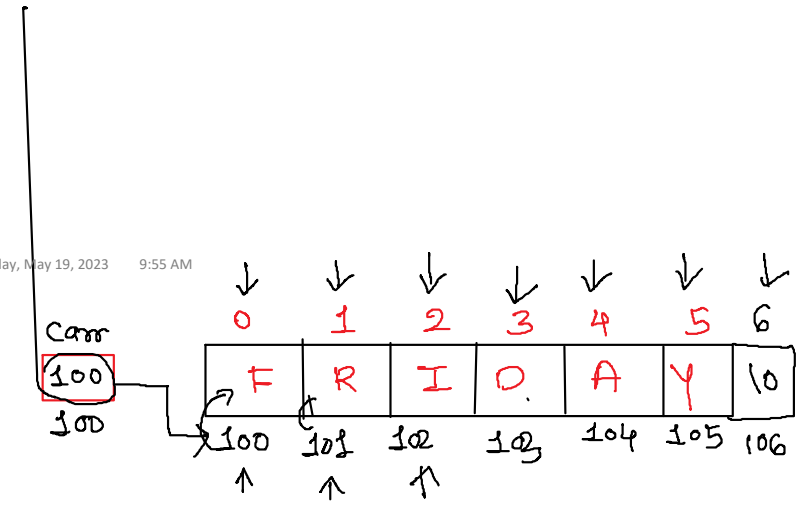
*p is constant

if p is pointing to centeroid
then green block is constant via p

if p is pointing num now value at p
nothing but yellow block is const


centeroid
442
100
P
108
104
num
5
108

Friday, May 19, 2023 9:55 AM



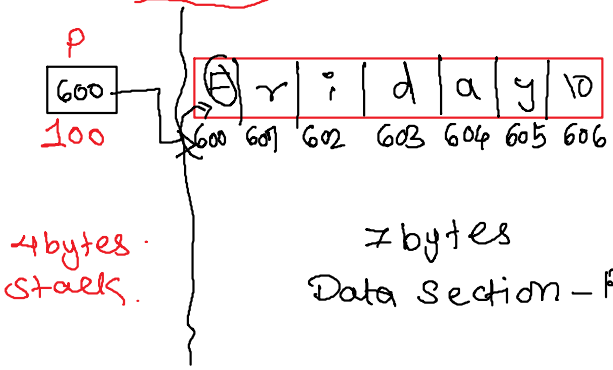

```
int i=0;
while(carr[i] != NULL )
{
    printf("%c",carr[i]);
    i++;
}
```

*(carr+i)

FRIDAY

---

char *p = "Friday" — Hardcoded Value → String literal constant



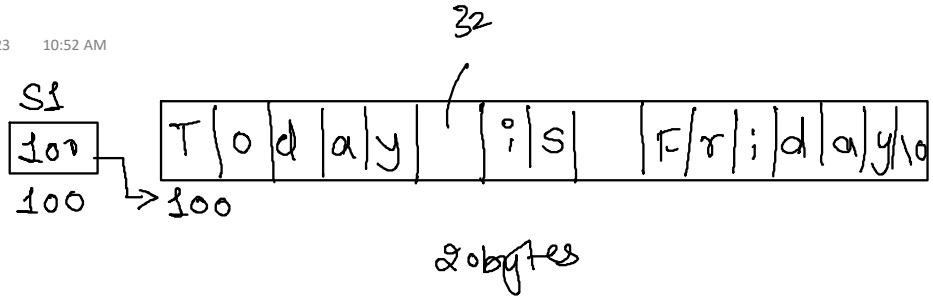

```
int main()
{
    char *p = "Friday";
    printf("size= %u \n",sizeof(p));
    printf("p=%u &p=%u p=%s\n",p,&p,p);
}
```

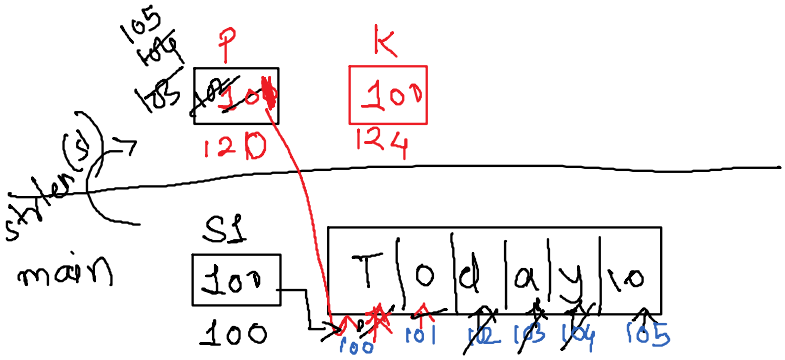
4 bytes · stack.

7 bytes

Data Section – R.O – Read Only .

*p = 'f';






```
size_t strlen(const char *p)
{
  char *k = p;
  while(*p !=NULL)
  {
     p++;
  }
  return p-k;
}
```

'T' != NULL 'o' != NULL 'd' != NULL

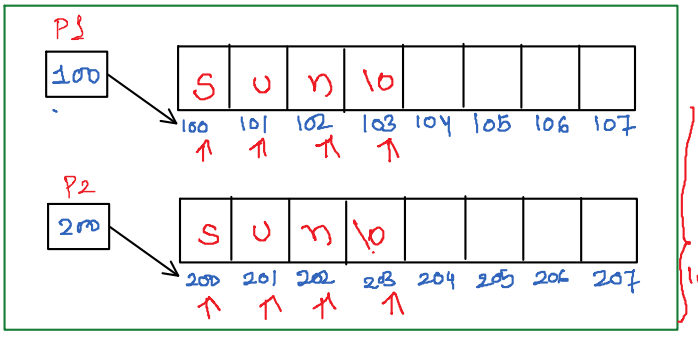
105 - 100

char add char add

p = p+1 100+1 = 101

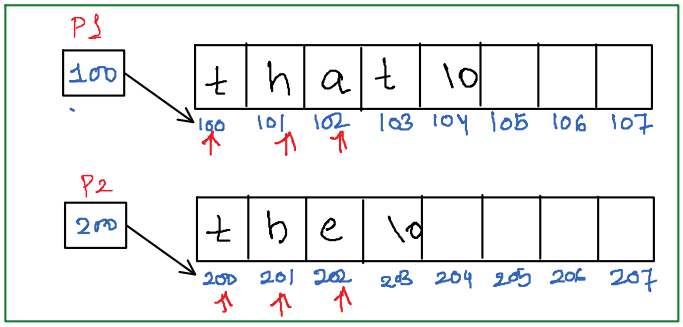
p = p+1 101+1 = 102

p = p+1 102+1 = 103

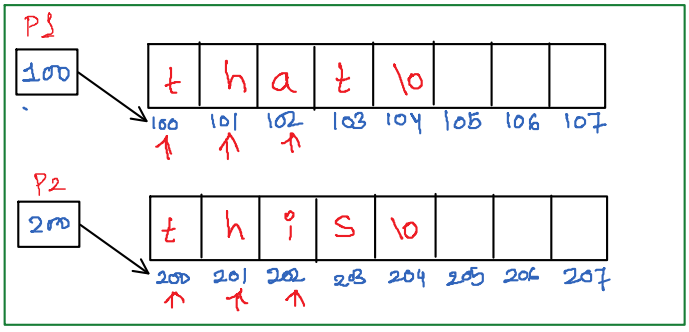


'\0' - 'b'

```
int mystrcmp(const char *p1,const char *p2)
{
    while(*p1!=NULL && *p2!=NULL)
    {
        if(*p1 != *p2)
            break;
        p1++;
        p2++;
    }
    return *p1 - *p2;   // '\0' - '\0' = 0-0=0
}
```



'a' - 'e' — Ascii value difference



'a' - 'i'