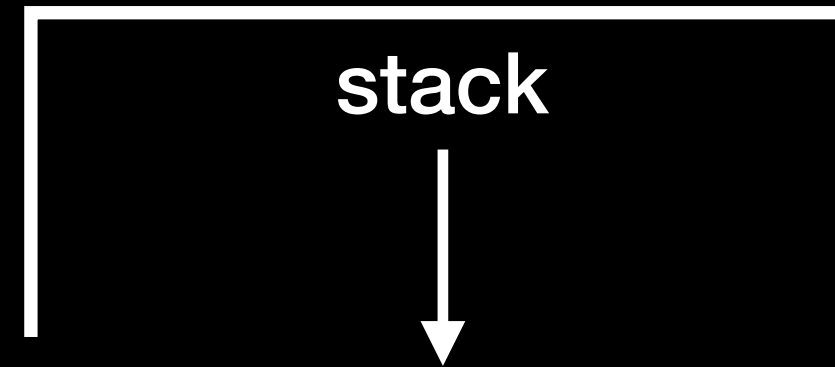


# Memory Management



**Executable file  
(a program)**

High address



shared libraries

heap

bss

initialized data

text

Low address

Process memory layout

uninitialized data

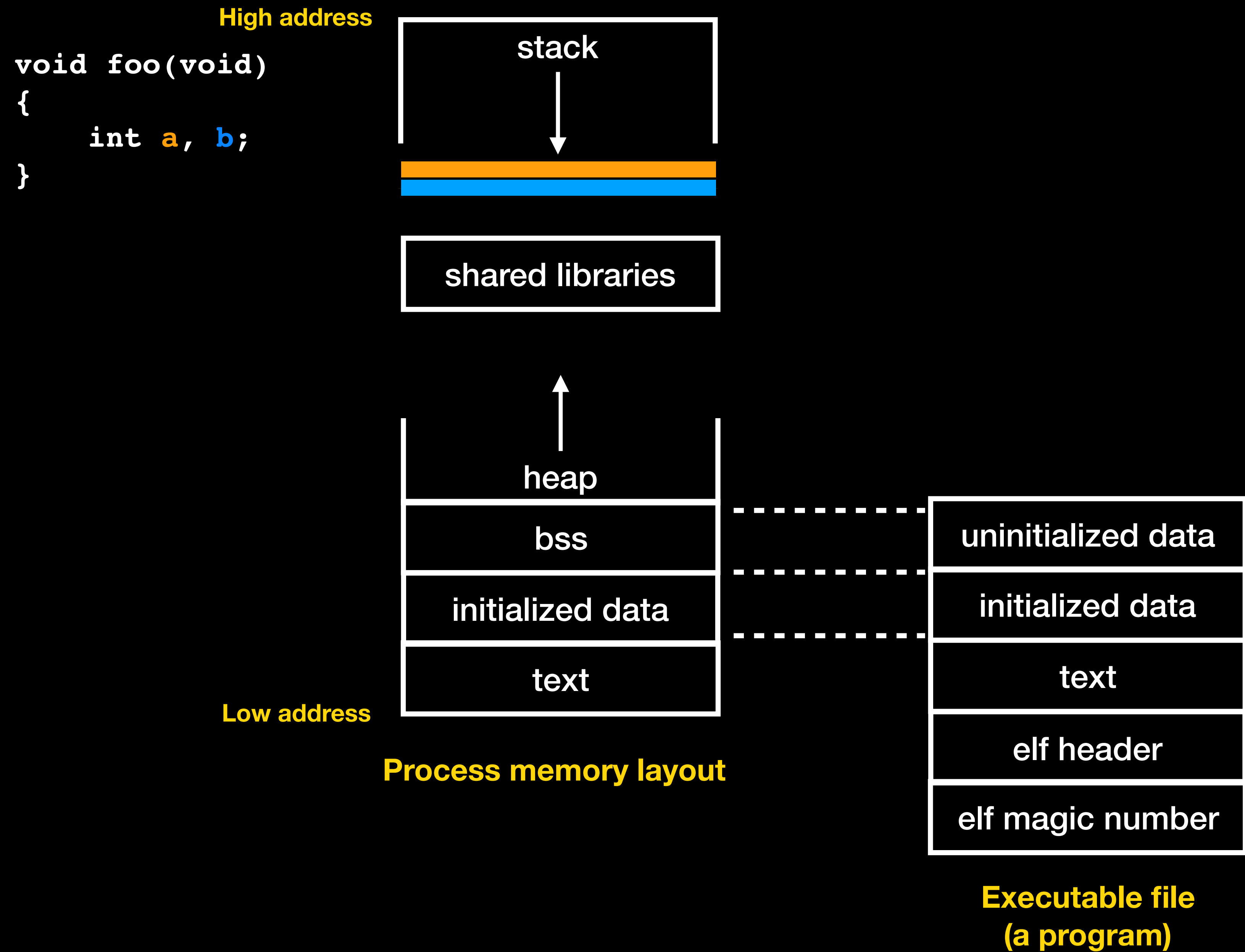
initialized data

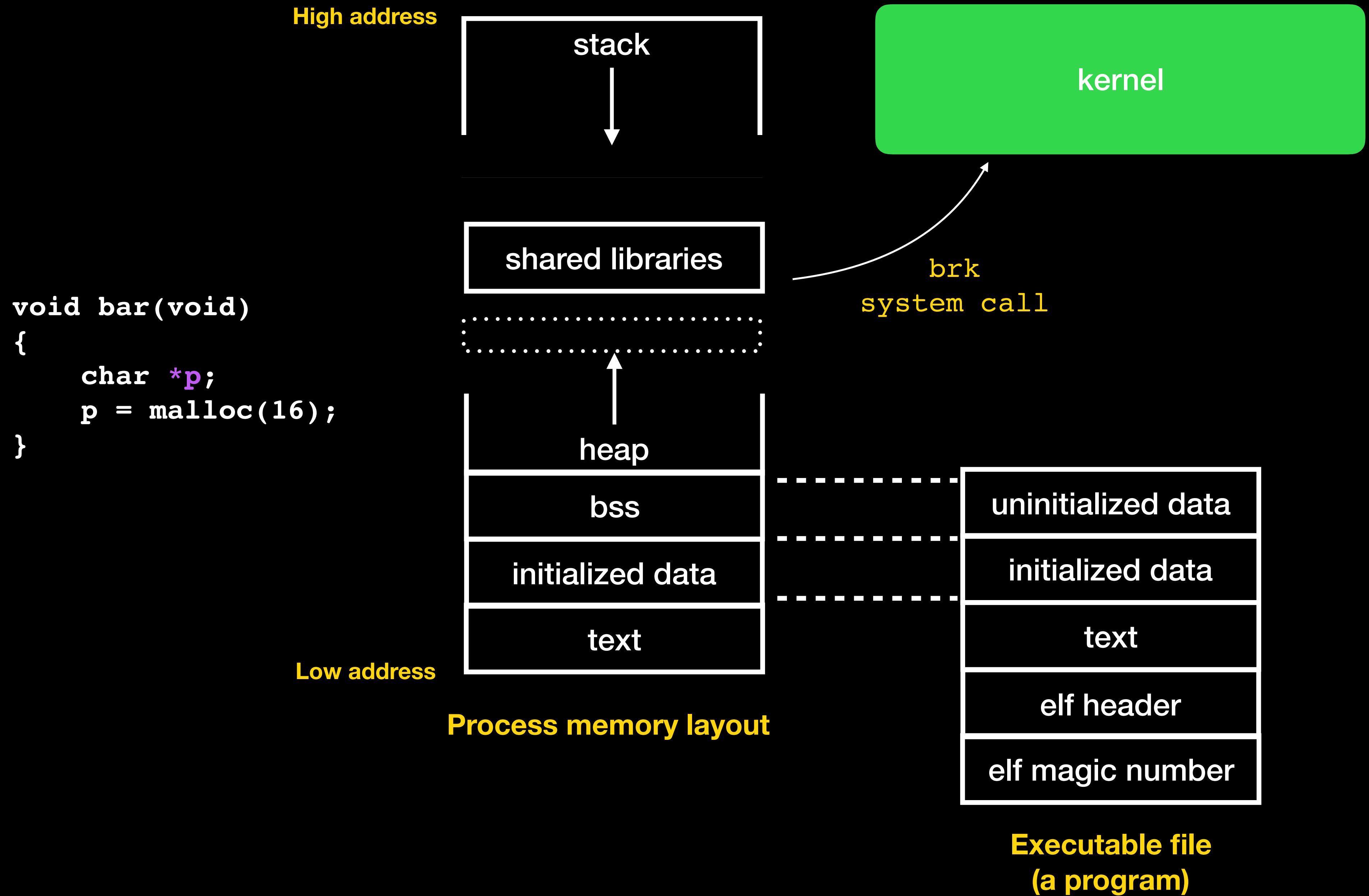
text

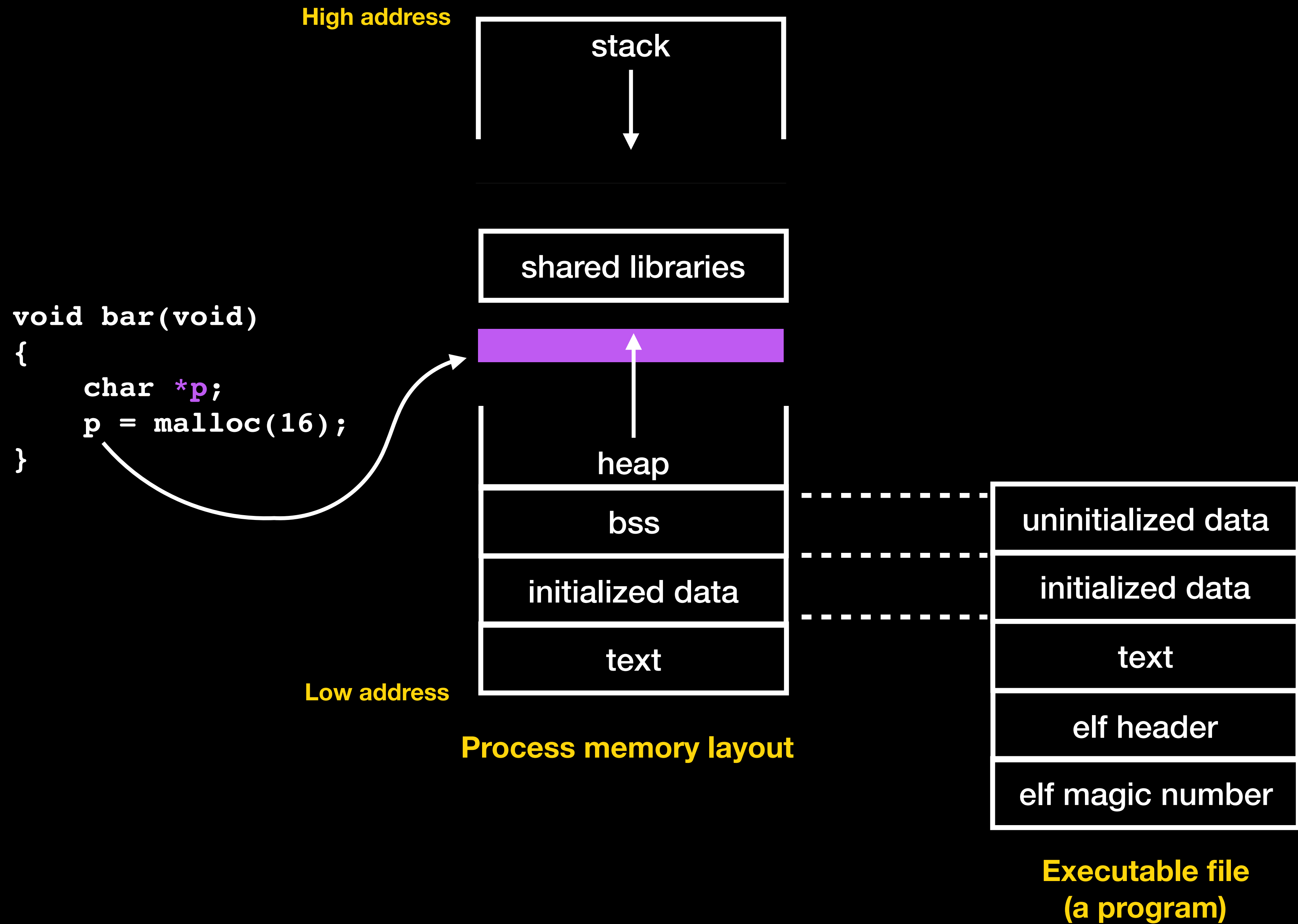
elf header

elf magic number

Executable file  
(a program)

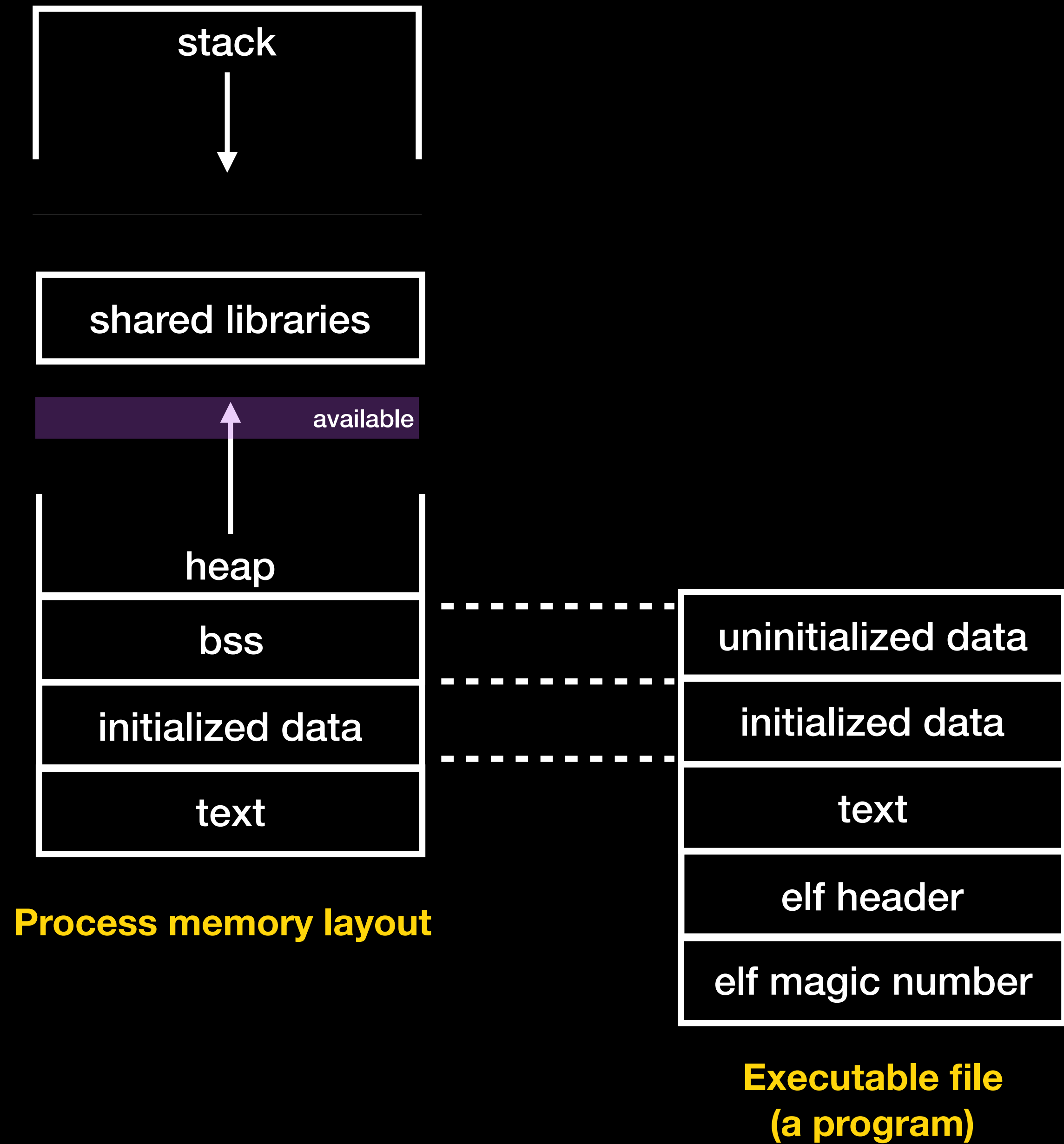






```
void bar(void)
{
    char *p;
    p = malloc(16);

    free(p);
}
```

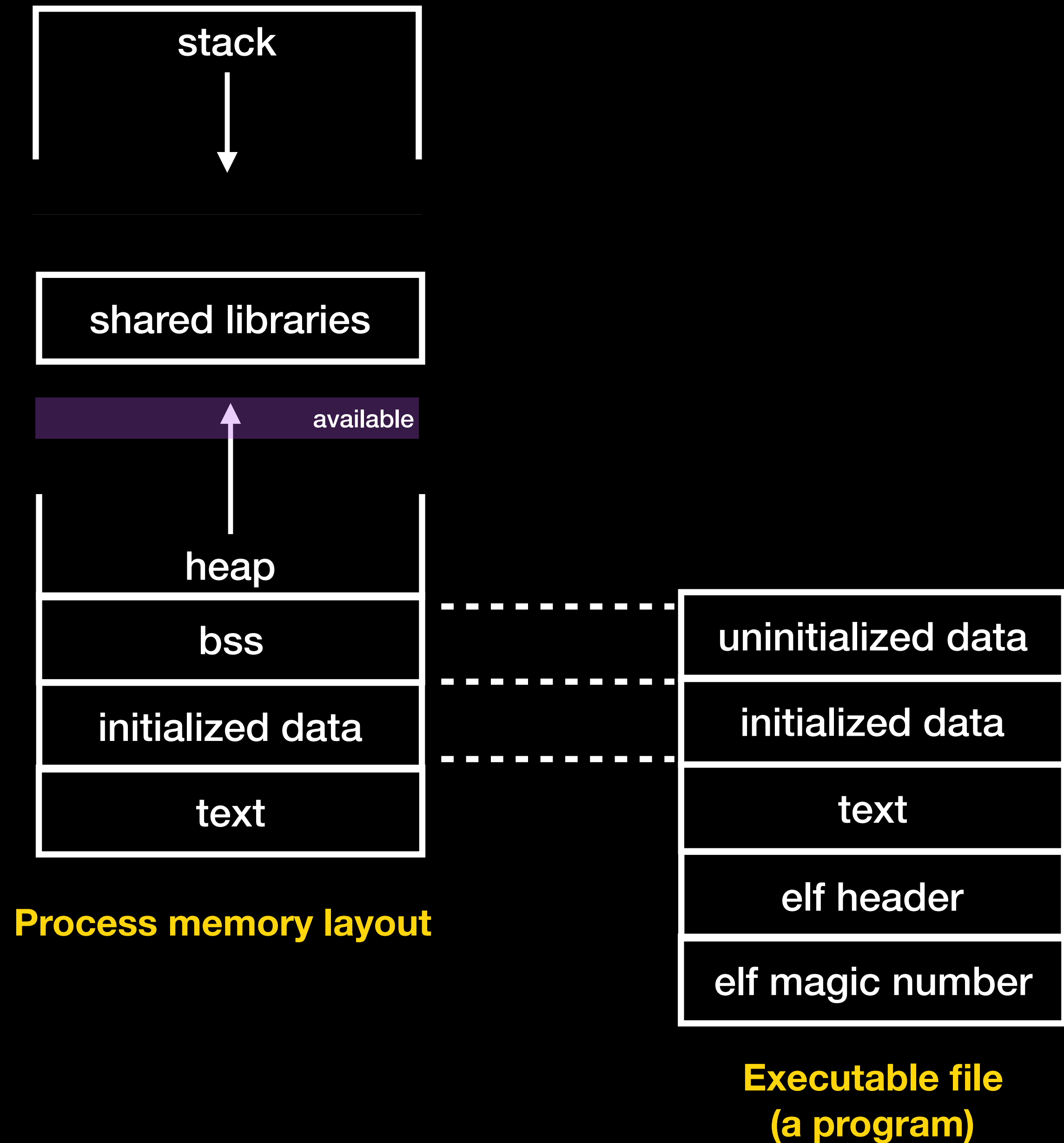


```
void bar(void)
{
    char *p;
    p = malloc(16);

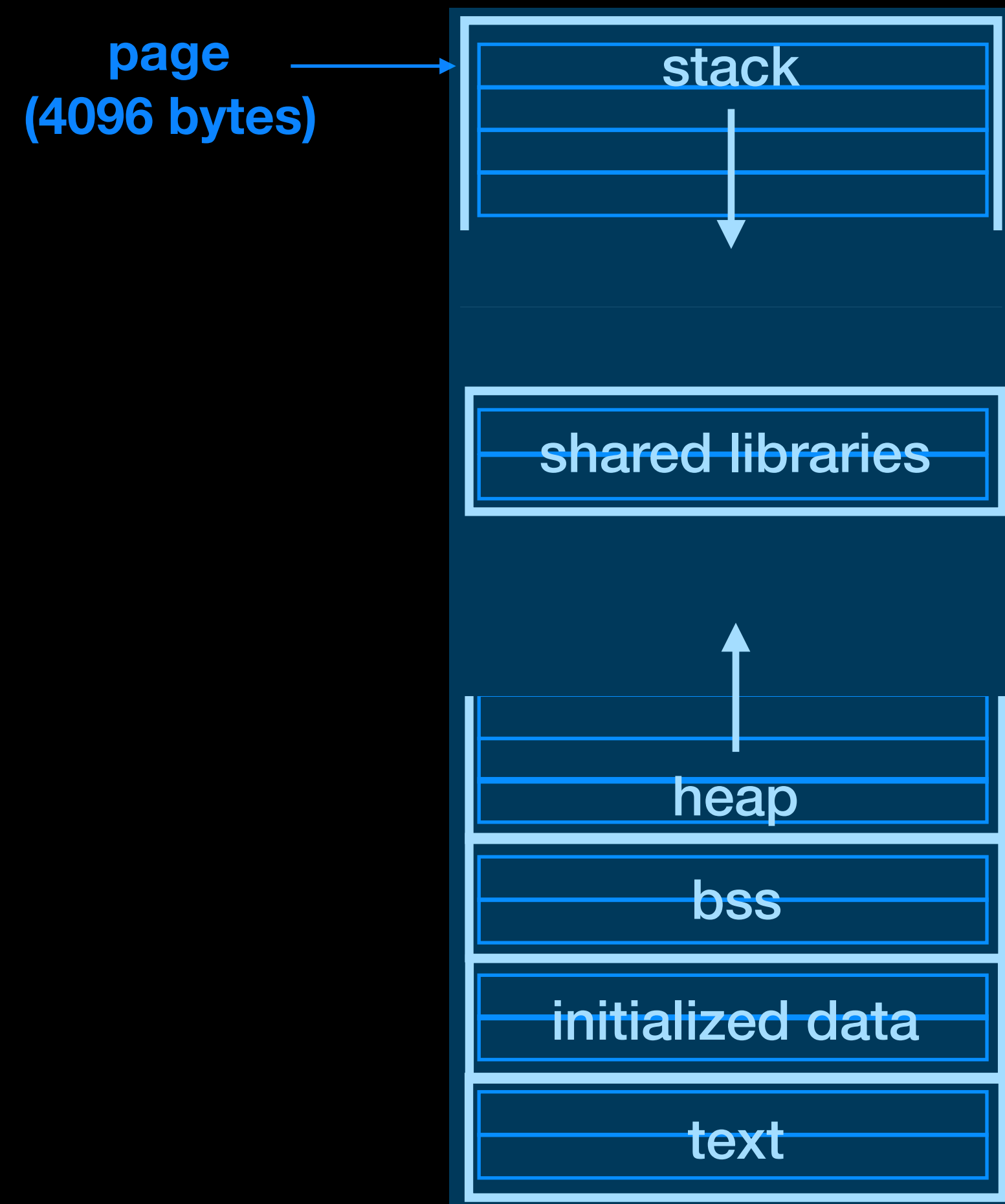
    free(p);
}
```

See also:

calloc  
realloc  
strdup/strndup







**Virtual Memory**



**Physical Memory**

