C Programming (W10)

Welcome!!

Please check attendance individually.

(Mobile App)

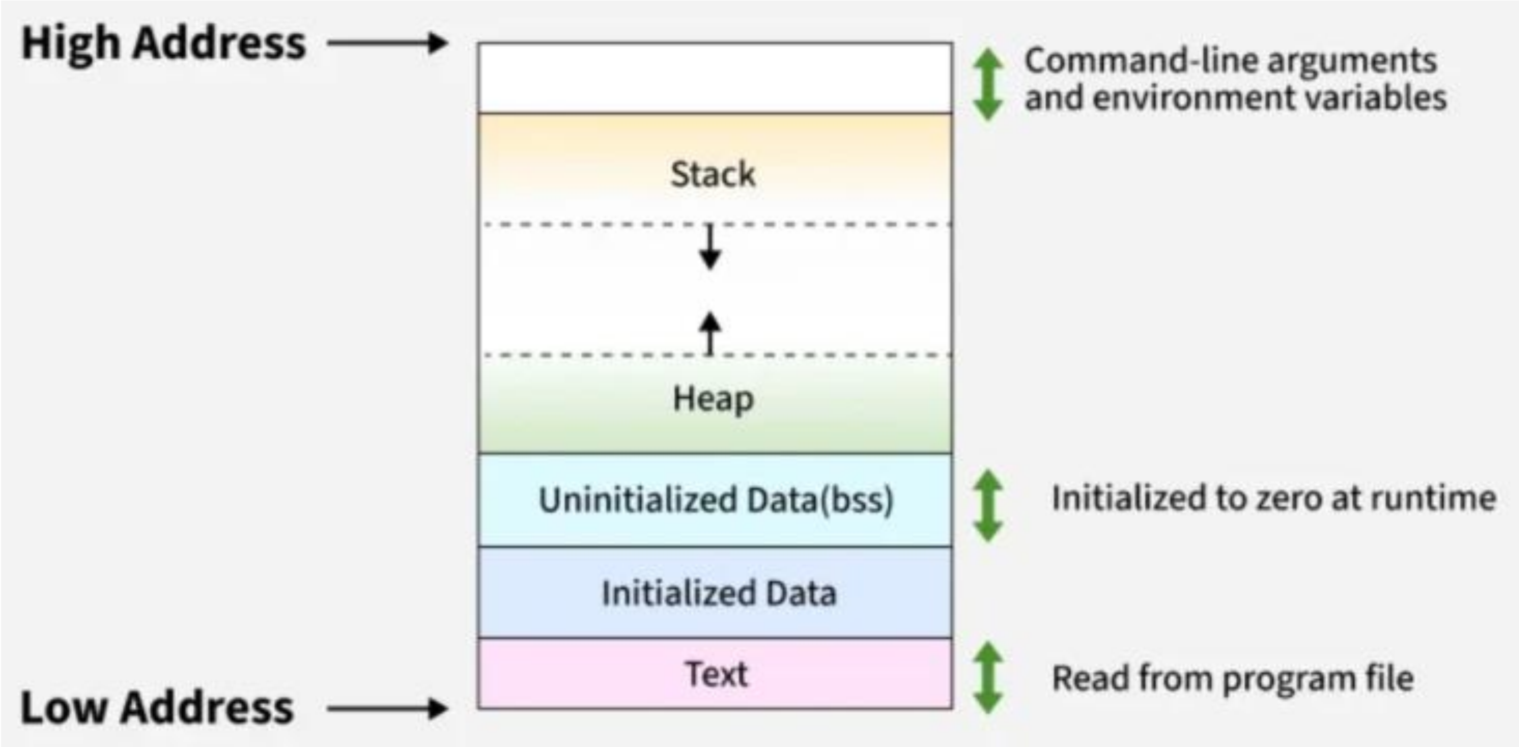
Things to do today

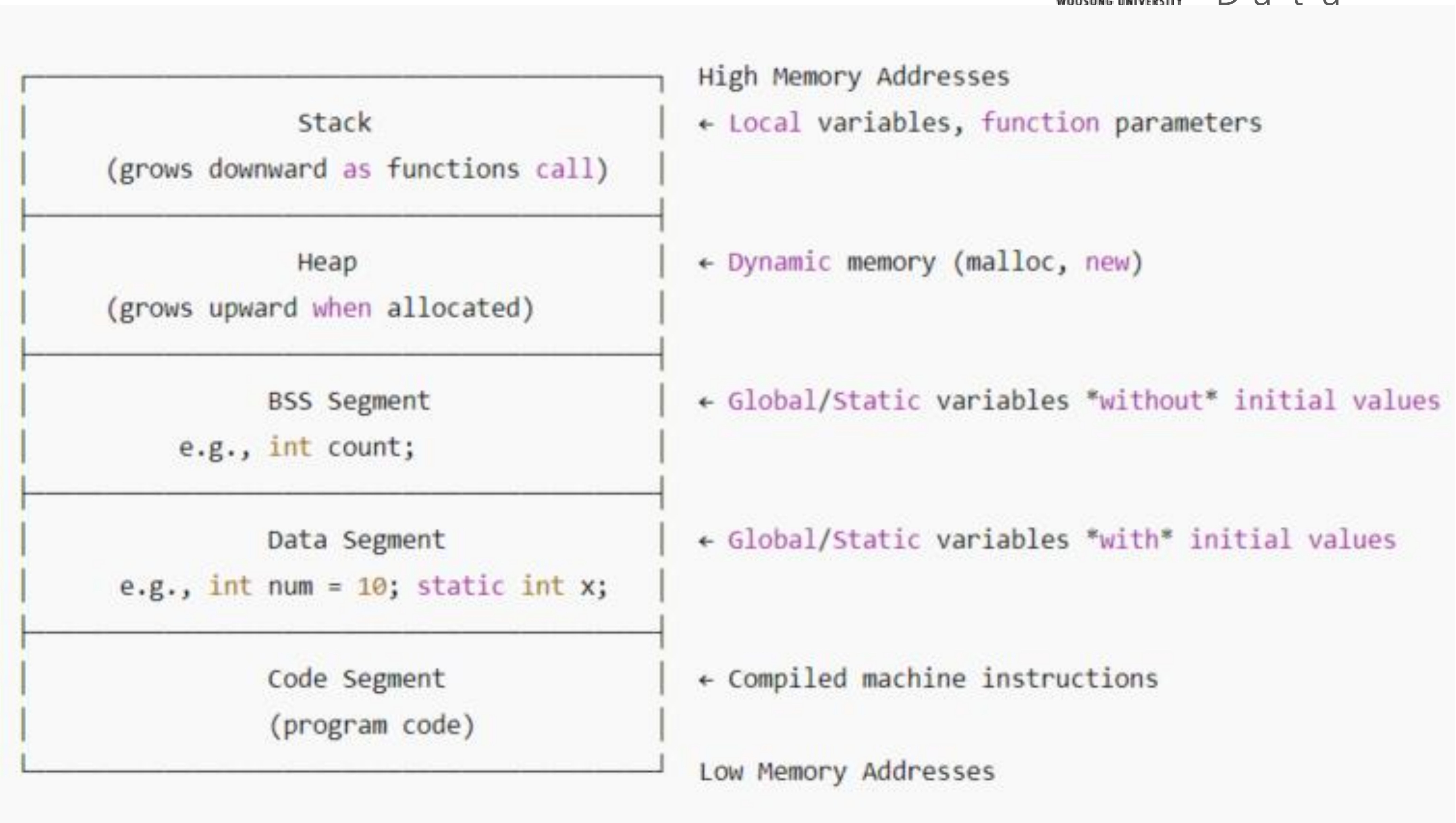
01 Lecture Notes (Ch.10)
- Array

02

03

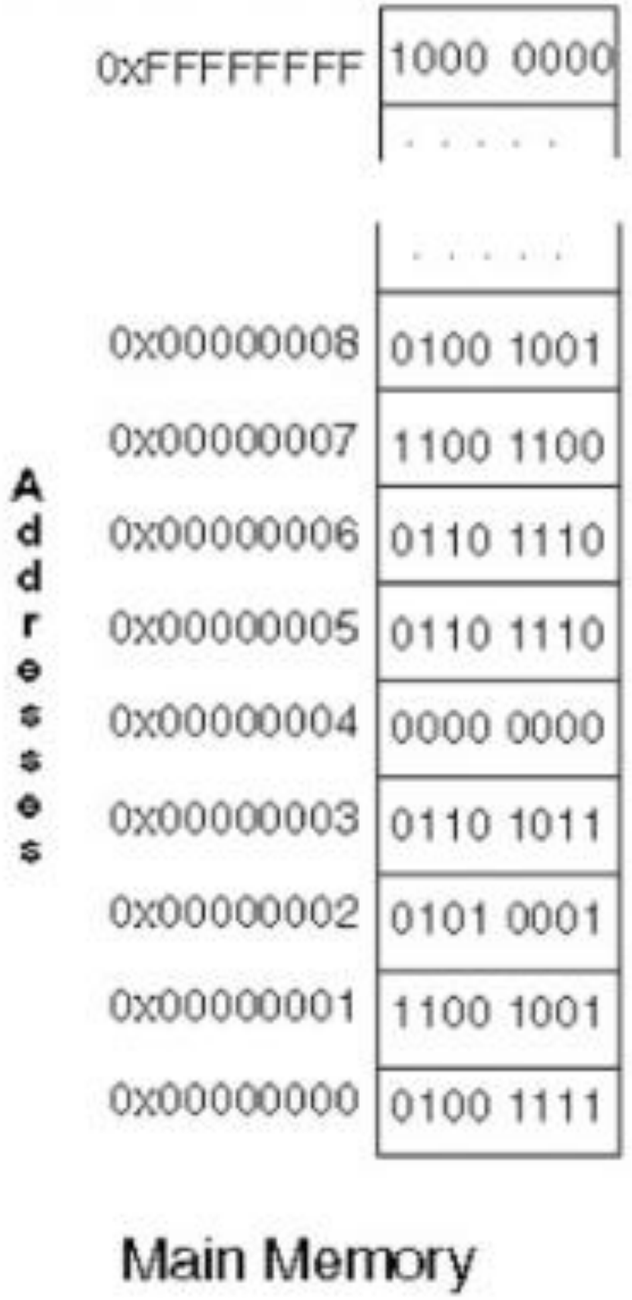
Actual Memory Layout in a C Program





Memory Area	What Goes Here	Example Code	Lifetime
Code Segment	Compiled program instructions	`main()`, other functions	Exists while program runs
Data Segment	Initialized global/static variables	`int a = 10;`	Exists while program runs
BSS Segment	Uninitialized global/static variables	`static int x;`	Automatically set to 0, exists while program runs
Heap	Dynamically allocated memory	`malloc()`, `new`	Must be manually freed by programmer
Stack	Local variables, function parameters	`int i;`, `void func(int n)`	Created when function is called, removed when it returns

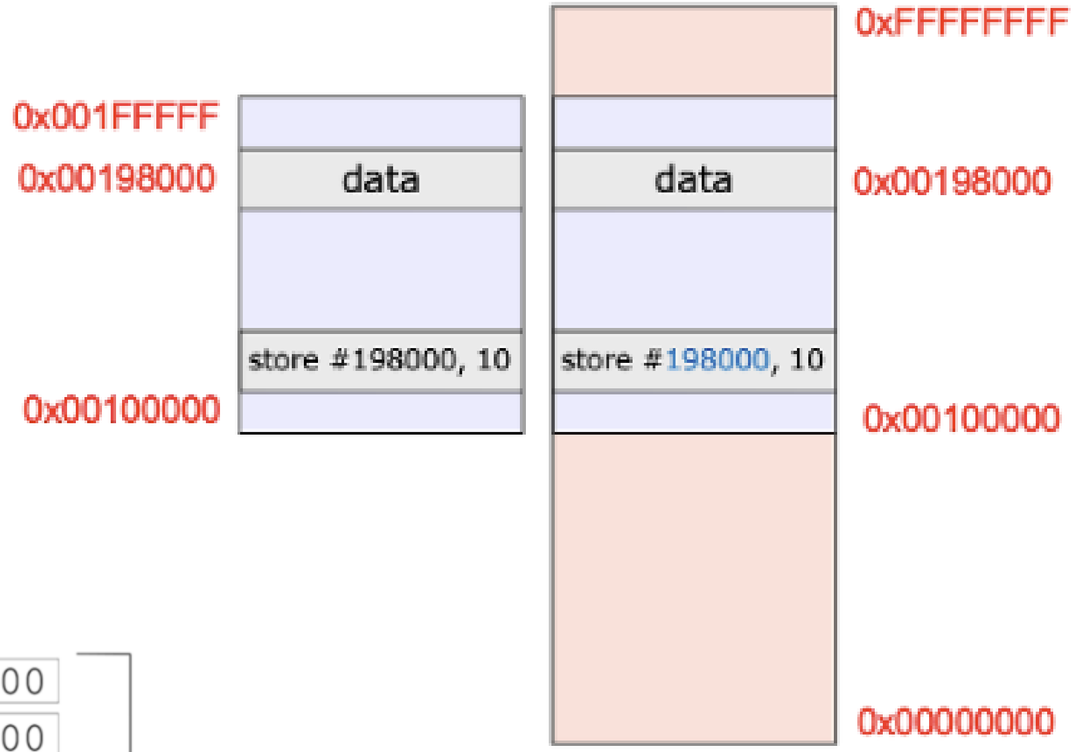
A pointer represents an address

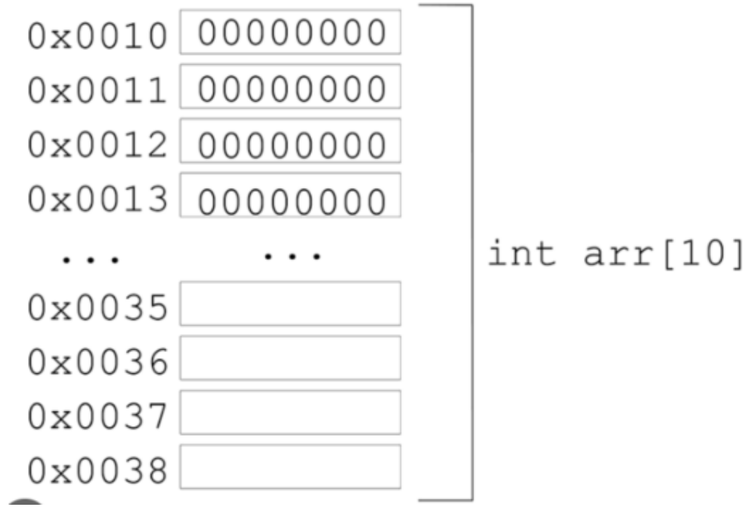


- Compile time

```
void func( )
{
  int data;

  ...
  data = 10;
  ...
}
```





See you next week!
DO NOT miss the classes