OS Bottom Line: Run Programs

Program Source

editor

```
int main()
{ … ;
}
```

foo.c

compiler

Executable

instructions

data

a.out

Load & Execute

Memory

0x000…

instructions

data

heap

stack

OS

0xFFF…

PC:

registers

Processor
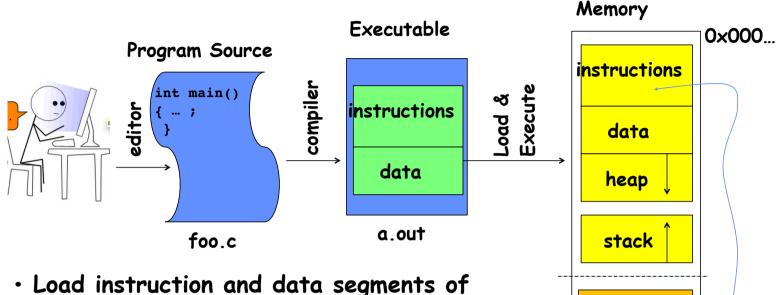
- **Load instruction and data segments of executable file into memory**
- **Create stack and heap**
- **"Transfer control to it"**
- **Provide services to it**
- **While protecting OS and it**