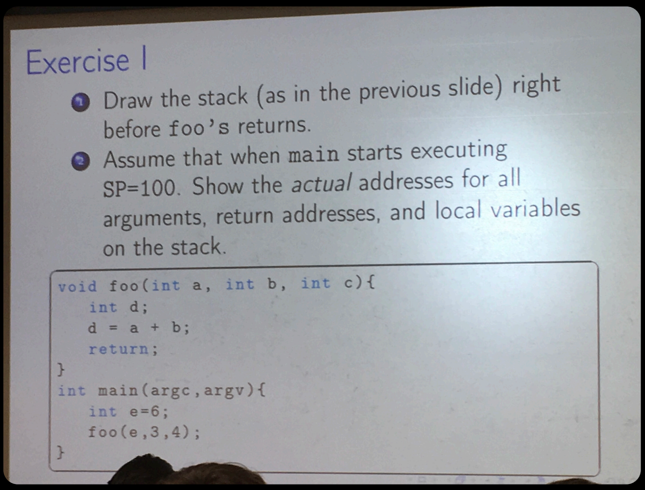
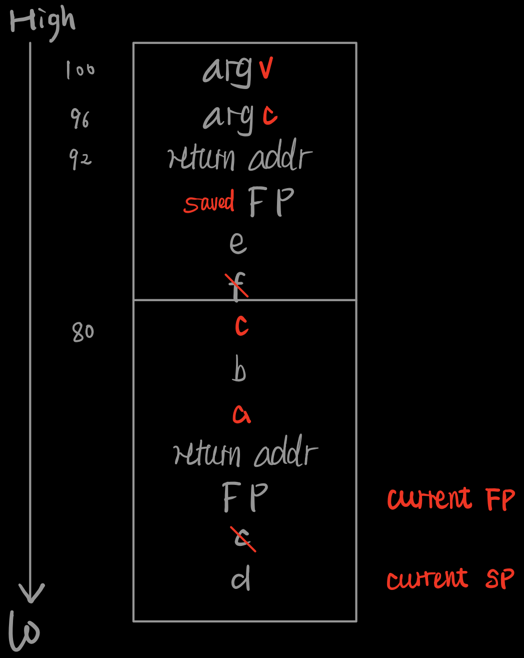
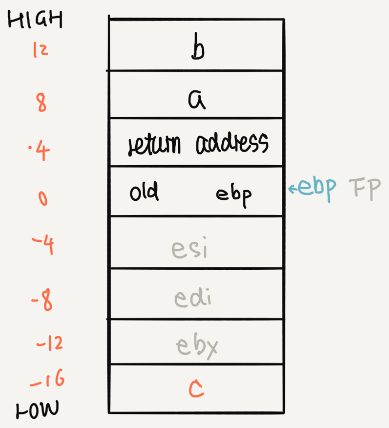


Exercise I

- Draw the stack (as in the previous slide) right before foo's returns.
- Assume that when main starts executing SP=100. Show the *actual* addresses for all arguments, return addresses, and local variables on the stack.

```
void foo(int a, int b, int c){
   int d;
   d = a + b;
   return;
}
int main(argc,argv){
   int e=6;
   foo(e,3,4);
}
```





```
int add ( int a , int b ) {
    int c ;
    c = a + b ;
    return c ;
}
   . global add
   . text
   add : #prolog
   push  %ebp            esp: top of stack
   movl  %esp  %ebp
   push edi  esi  ebp  ebx
   subl  $4 , % esp
   movl  12(% ebp), % ebx
   addl  8 ( % ebp ), % ebx
   movl  % ebx , -16 ( % ebp )
   movl  -16( % ebp ) , % eax   retval
   addl  $4 , % esp
   restore 3 values  #pop ebx, edi, esi
```