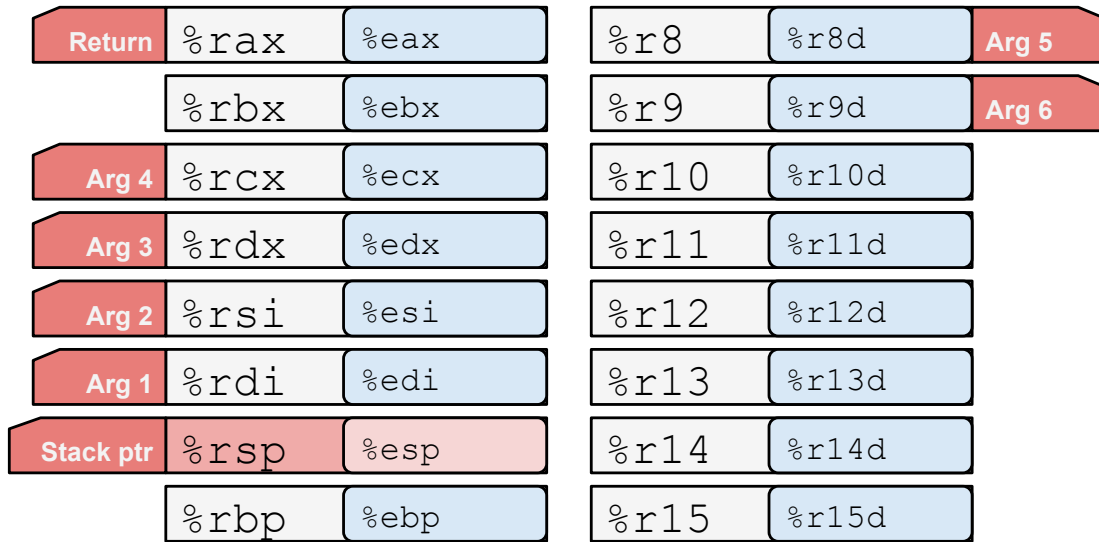
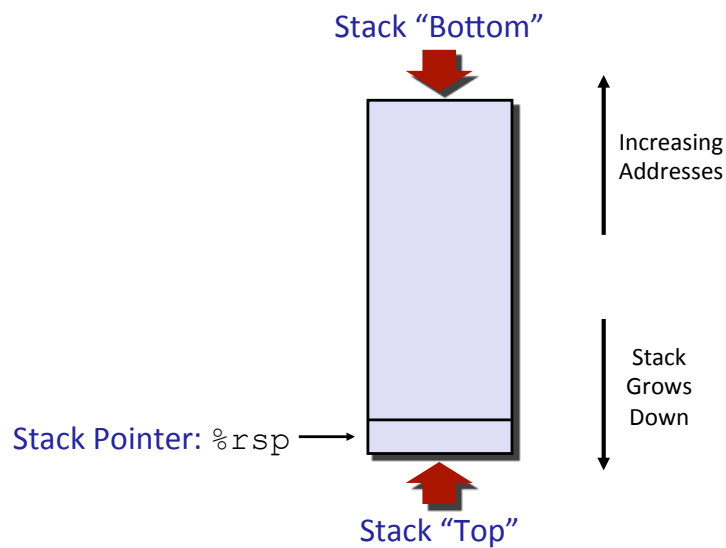


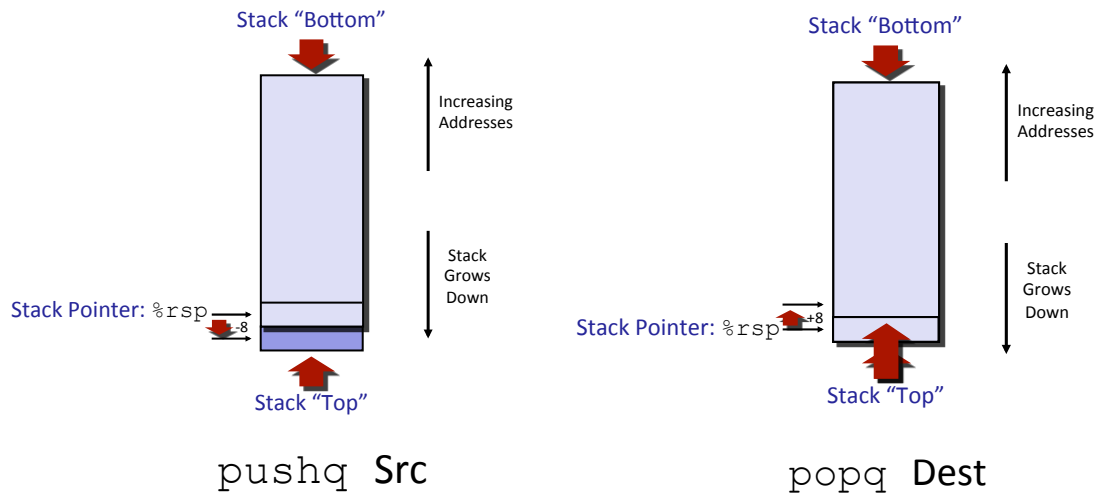
Procedure Call Registers



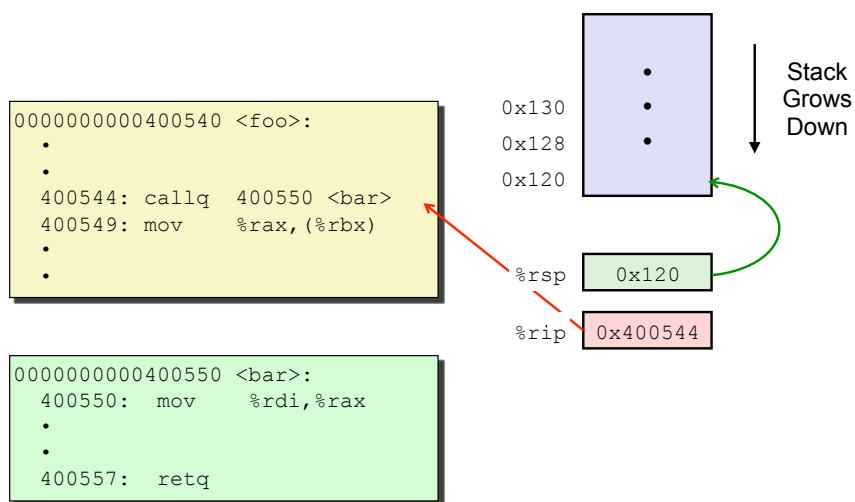
Call Stack



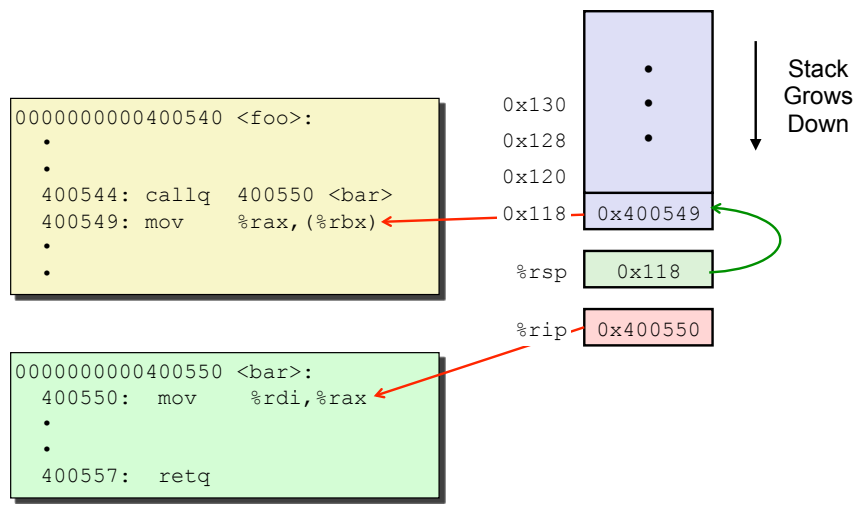
Stack Operations



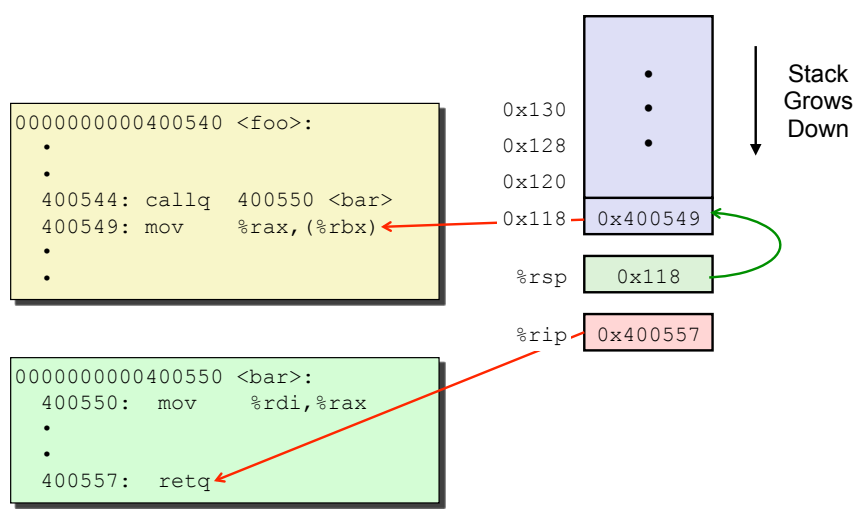
Procedure Call Example (1)



Procedure Call Example (2)



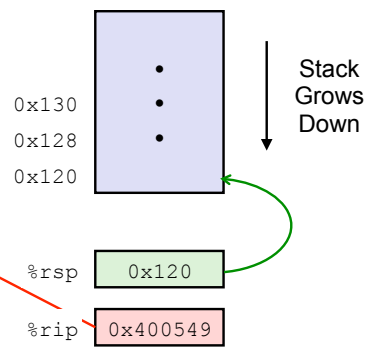
Procedure Call Example (3)



Procedure Call Example (4)

```
0000000000400540 <foo>:  
.  
.  
400544: callq 400550 <bar>  
400549: mov  %rax, (%rbx)  
.  
.
```

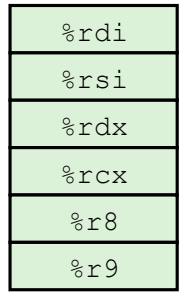
```
0000000000400550 <bar>:  
400550: mov  %rdi,%rax  
.  
.  
400557: retq
```



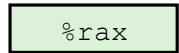
Passing Data

Registers

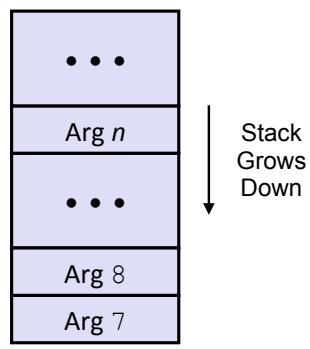
- First 6 arguments



- Return value

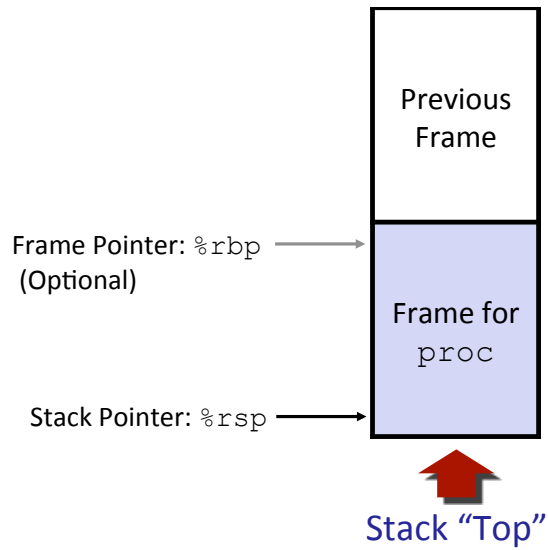


Stack

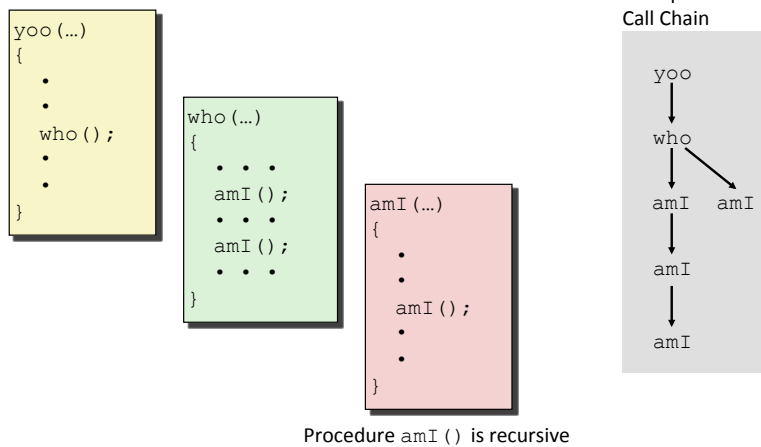


Stack "Top"

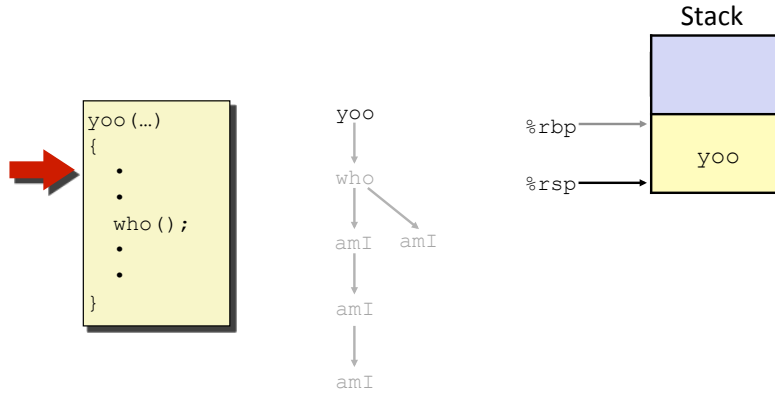
Stack Frames



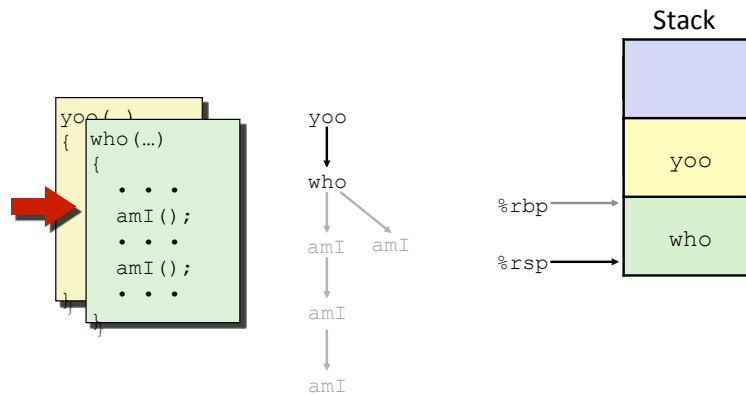
Call Chain Example



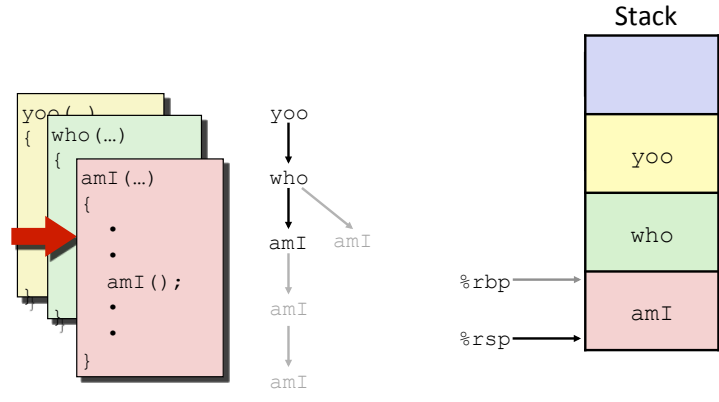
Stack Frame Allocation (1)



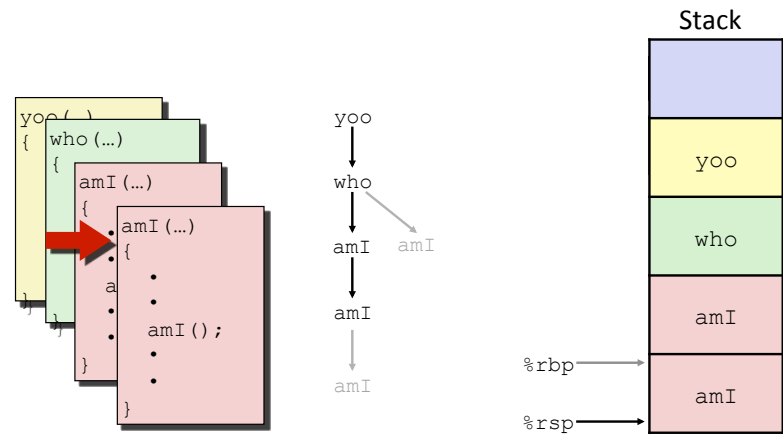
Stack Frame Allocation (2)



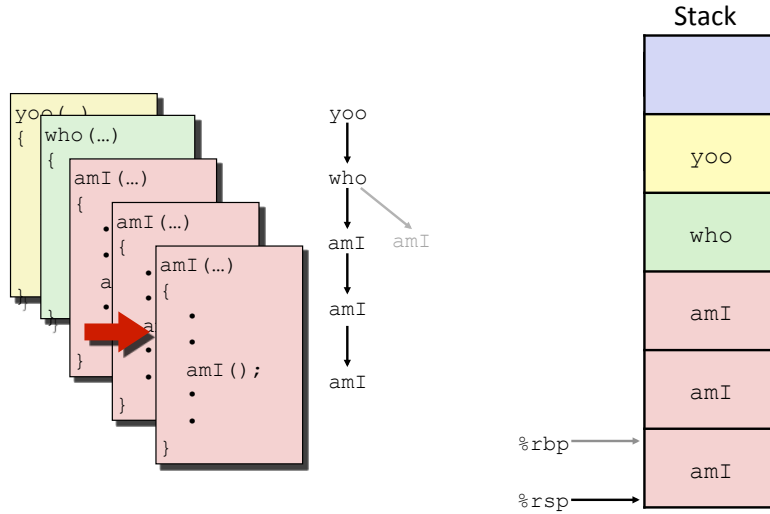
Stack Frame Allocation (3)



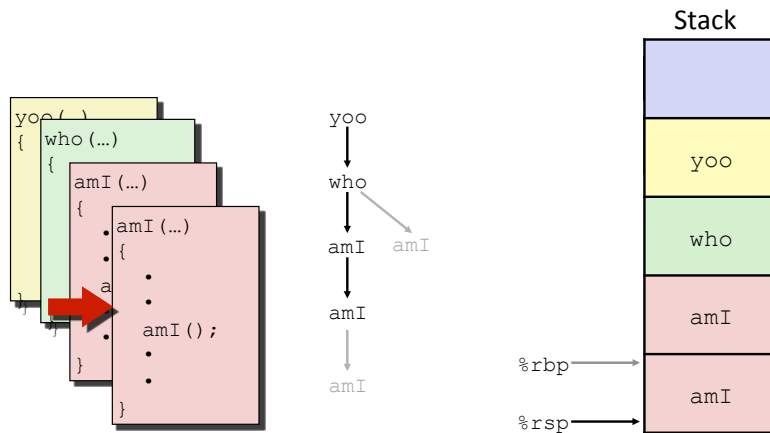
Stack Frame Allocation (4)



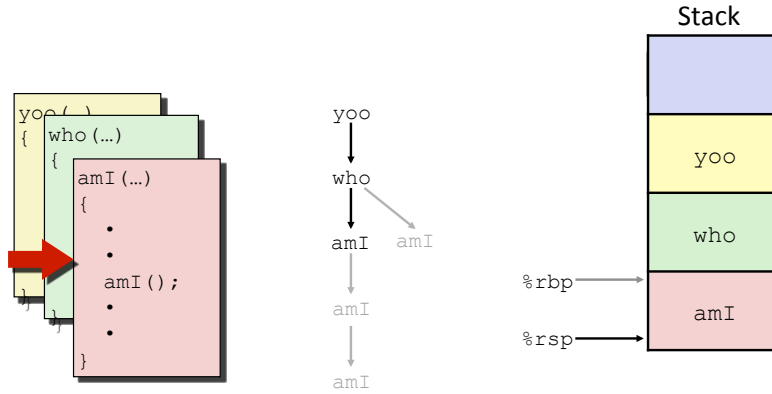
Stack Frame Allocation (5)



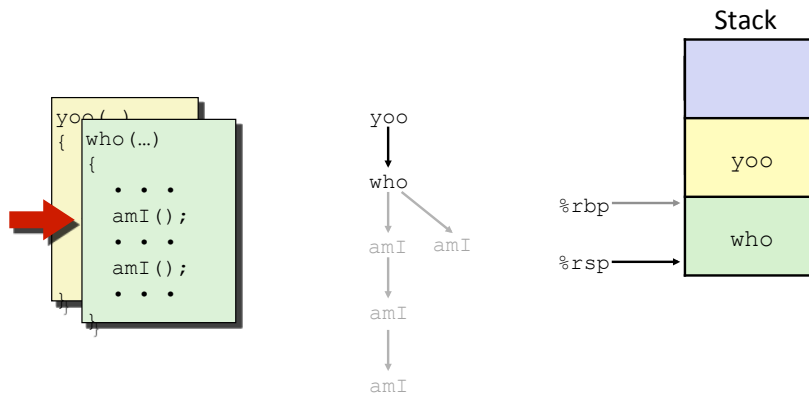
Stack Frame Allocation (6)



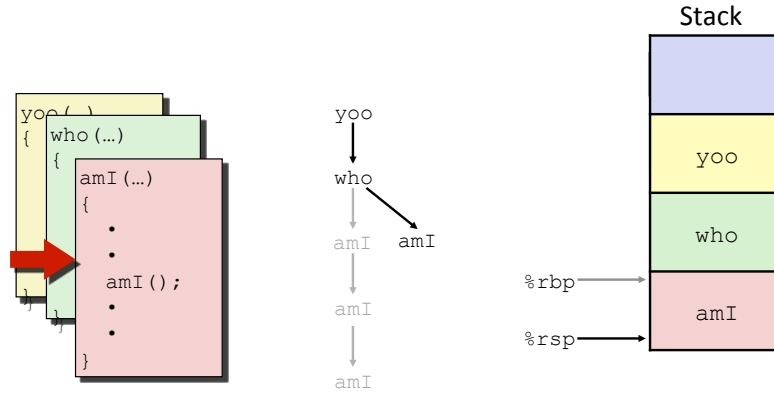
Stack Frame Allocation (7)



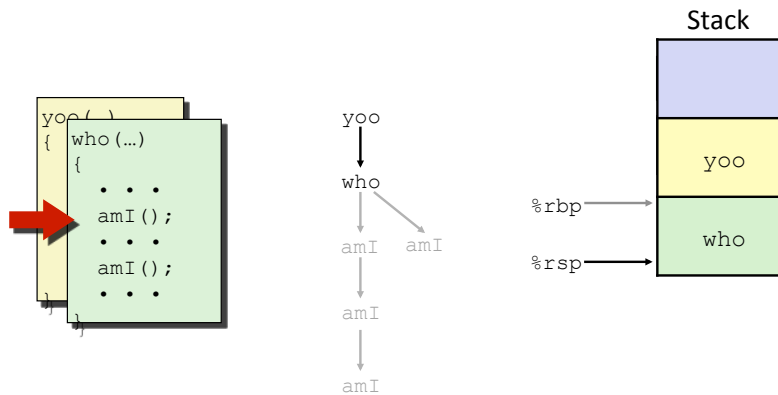
Stack Frame Allocation (8)



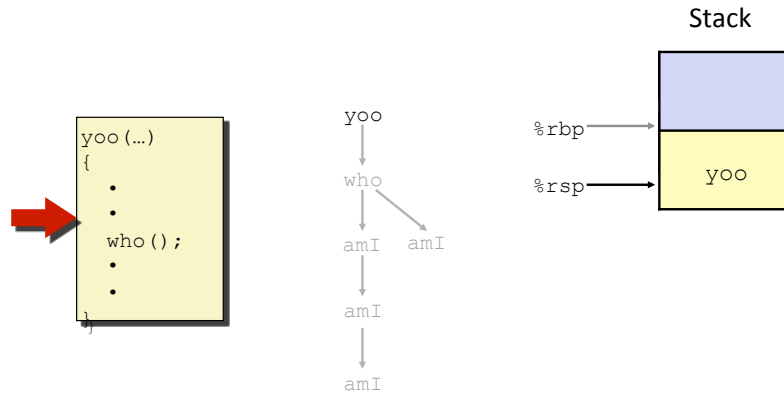
Stack Frame Allocation (9)



Stack Frame Allocation (10)



Stack Frame Allocation (11)



Stack Frame Components

