Chapter 6
The Procedure Abstraction
Figure 6.1

(b) Call Graph
Figure 6.3

(c) Nesting Relationships

(d) Calling Relationships
Figure 6.4

- Local-Data Area
- Caller’s ARP
- Addressability
- Return Address
- Return Value
- Register-Save Area
- Parameters

ARP + n
ARP
ARP - m

Local-Data Area
Caller’s ARP
Addressability
Return Address
Return Value
Register-Save Area
Parameters
Caller’s AR
Figure 6.5
Figure 6.8
Figure 6.10

Procedure $p$

Prologue

Precall

Postreturn

Epilogue

Procedure $q$

Prologue

Epilogue

Call

Return
Figure 6.11

(a) Allocated Block

(b) Free Block
Figure 6.14

(b) Activation Record Structure

(c) Initial Activation Record