

Name-declaration binding: Pascal

```
program Sample(input, output);  
  var x, y : Real;  
  procedure op1;  
    var y, z : Integer;  
  begin  
    ...  
    x := 27.4;  
    ...  
    y := 34;  
    ...  
  end {op1};  
begin  
  ...  
  y := 3.7;  
  ...  
end {Sample}.
```

Name-declaration binding: Java

```
class Sample {  
    private double x, y;  
    public void op1() {  
        int y, z;  
        ...  
        x = 27.4;  
        ...  
        y = 34;  
        ...  
    } //op1  
    public void op2() {  
        ...  
        y = 3.7;  
        ...  
    } //op2  
} // Sample
```

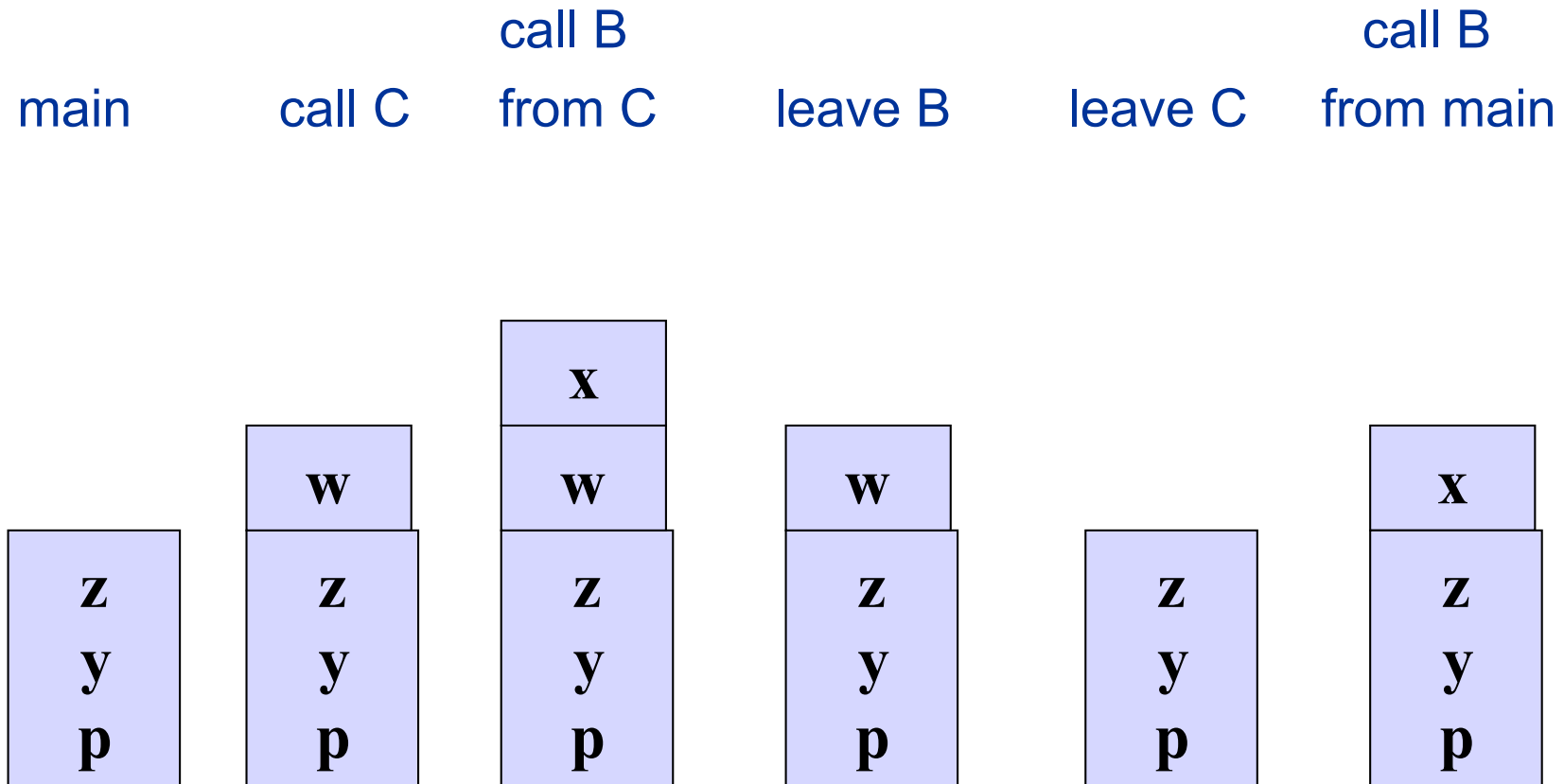
Stack storage allocation

Allocation of space to local variables on block entry is implemented using a stack.

The following example uses Pascal, but Java acts in the same way.

```
program main;  
  var y, z : integer;  
  var p : ^integer;  
  procedure B;  
    var x : integer;  
  begin ... end {B};  
  procedure C;  
    var w : integer;  
  begin ... B; new(p); ... end {C};  
begin ... C; ... B; ... end.
```

Stack storage allocation



Chapter 6.4

Stack storage allocation: activation records

