

Warning: if a record variable $P↑$ is created by the second form of *New*, then this variable must not change its variant during program execution. Assignment to the entire variable is an error; however one can assign to the components of $P↑$.

The first step in programming a solution to our problem posed above, is to introduce a pointer variable. Let it be called *NewP*. Then the statement

New (*NewP*)

allocates a new variable of type *Person*.

Next the new variable, referenced by the pointer *NewP*, is to be inserted after the person referenced by *Pt*. See Figure 10.d.

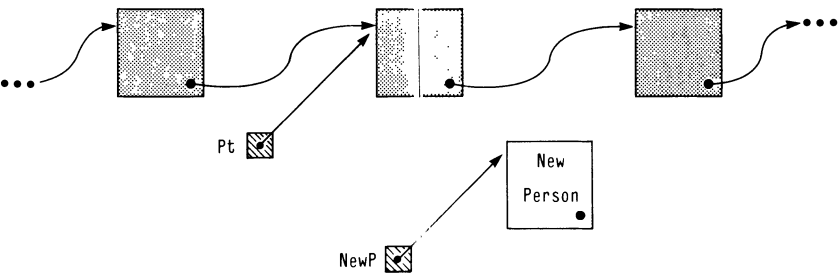


Figure 10.d Linked List Before Insertion

Insertion is a simple matter of changing the pointers:

$NewP↑.Next := Pt↑.Next;$
 $Pt↑.Next := NewP$

Figure 10.e illustrates the result.

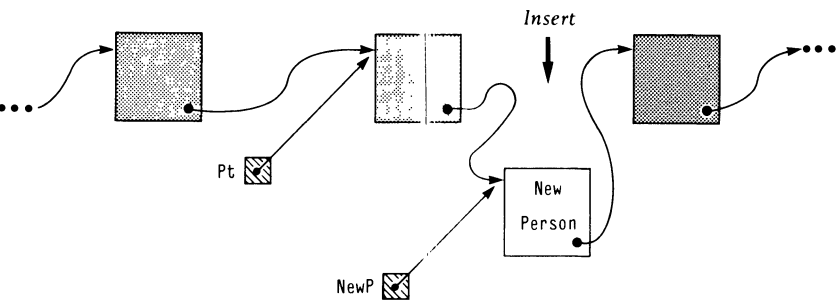


Figure 10.c Linked List After Insertion