```
procedure Closure( I an item set of the grammar G )
returns an item set of G, which may be the same as I

  Recall that P is the set G′s production rules; A,B ∈ N,
  the set of G′s non-terminals, and α,β ∈ (N ⋃ Σ$)*
  are sequences of grammar symbols.

  let C be a copy of I
  repeat (
    foreach ( A → α•Bβ in C ) do (
      if ( B → π ∈ P and B → •π ∉ C) then
        add B → •π to C
      )
    )
  ) until ( C is unchanged )

  return C
```