```
Queue
Procedure CrerateListMakanan(In/Out Q : ListMakanan)
Algoritma
Kamus
       O.first \leftarrow NULL
endprocedure
Function isEmpty(Out Q : ListMakanan) → bool
Kamus
Algoritma
       return Q.first = NULL
endfunction
Procedure CreateElemen(In/Out Q : ListMakanan, In/Out P : adr)
Kamus
Algoritma
       P ← new Elemen
       Info(P) \leftarrow X
       Info(P) \leftarrow NULL
endprocedure
Procedure Enqueue(Im/Out Q : LisrMakanan, In P : adr)
Kamus
Algoritma
       if isEmpty(Q) then
               Q.first \leftarrow P
       else
               address\ last \leftarrow Q.first
               while next(last) != NULL do
                      last \leftarrow next(last)
```

endwhile

endif

endprocedure

 $next(last) \leftarrow P$ 

```
Procedure Dequeue(In/Out Q : ListMakanan, In/Out P : adr)
Kamus
Algoritma
       If isEmpty(Q) then
               P \leftarrow \text{NULL}
       else
               P \leftarrow Q.first
               Q.first \leftarrow next(Q.first)
       endif
endprocedure
Procedure ShowSemuaMakanan(In Q : ListMakanan)
Kamus
Algoritma
       if isEmpty(Q) then
               output ("Belum Ada Pesanan")
               return
       endif
       output("pemesanan")
       address P \leftarrow Q.first
       while P!= NULL do
               output("Pesanan Ke-", info.ID(P))
               output("Makanan :", info.Makanan(P))
               output("Porsi : ", info.Porsi(P))
               P \leftarrow next(P)
       endwhile
endprocedure
```

## Stack

```
Procedure CreateStack(In/Out S: stack)
Kamus
Algoritma
       S.top ← -1
endprocedure
function isEmpty(in S : stack)
Kamus
Algoritma
       Return S.top = -1
endfunnction
functionn isFull(in S : stack)
Kamus
Algoritma
       Return S.top = maxE1 - 1
endfunnction
procedure Push(In/Out S : stack, X : infotype)
Kamus
Algoritma
       If isFull(S) then
              Output("Tidak Ada Piring")
              Return
       endif
       S.top++
       S.data[S.top] \leftarrow X
Endprocedure
```

```
Function Pop(In/Out S : stack) \rightarrow int
Kamus
Algoritma
       If isEmpty(S) then
               Output("Stack is empty")
               Return -1
       Endif
       Infotype X \leftarrow S.data[S.top]
       S.top—
       Return X.ID
Endfunction
Procedure PrintStack(In S : stack)
Kamus
Algoritma
       If IsEmpty(S)
               Output("Stack is empty")
               Return
       endif
       output("Piring:")
       for int i \leftarrow S.top I down to 0 do
               output("Piring Ke", S.data[i].ID, "", "Porsi: ", S.data[i].Porsi)
       endfor
endprocedure
```

```
function Menu() \rightarrow int
Kamus
       int choice
Algoritma
       Output("Menu:")
       Output("1. Masukkan Pesanan")
       Output("2. Hapus Pesanan")
       Output("3. List Pesanan")
       Output("4. Tambah Piring")
       Output("5. Hapus Piring")
       Output("6. List Piring")
       Output("7. Exit")
       Output("Enter your choice: ")
       Input(choice)
       Return choice
endprocedure
```