## **INILL\$ - Initialise Doubly Linked-List Index Block**

The INILL\$ routine initialises a separate Index Block for a doubly linked-list.

#### 1. Invocation

To initalise the separate Index Block for a doubly linked-list code:

```
CALL INILL$ USING ib entries
```

where *ib* is the Index Block to be initialised; and *entries* is a PIC 9(4) COMP variable, or literal, which contains the number of entries, *n*, in the Index Block. The Index Block is assumed to have this structure:

```
01 IB
02 FILLER OCCURS n
03 NEXTI PIC 9(4) COMP * INDEX OF NEXT ENTRY
03 PREVI PIC 9(4) COMP * INDEX OF PREVIOUS ENTRY
```

### 2. STOP Codes and Exception Conditions

No STOP codes are generated by INILL\$.

The following EXIT codes may be returned by INILL\$:

EXIT code	\$\$COND	Description
15908	08	Exception returned from SVC-61.

### 3. Programming Notes

INILL\$ is only available with GSM SP-41, or later.

INILL\$ sets the first (N-1) NEXTI entries to (N+1); and the Nth NEXTI entry to 0. INILL\$ sets the first PREVI entry to 0; and entries 2 to N to (N-1).

INILL\$ can only be used when the indexes of the entries the doubly link-list are held in a separate table. INILL\$ could be extended to assume to the next and previous indexes are the first two PIC 9(4) COMP fields in a more complex structure (in which case the length of each entry would have to be passed as an extra parameter). For example

```
01 IB
02 FILLER OCCURS n
03 NEXTI PIC 9(4) COMP * INDEX OF NEXT ENTRY
03 PREVI PIC 9(4) COMP * INDEX OF PREVIOUS ENTRY
03 LLENTRY PIC X(?) * ACTUAL DATA IN LINKED LIST
```

INILL\$ could be further extended to assume to the first two fields in the doubly linked-list are the "next" and "previous" pointer, respectively. As above, the length of each entry would have to be passed as an extra parameter). For example:

#### INILL\$ - Initialise Doubly Linked-List Index Block

01	IB				
	02 FILLE	R OCCURS n			
	03	NEXTPTR	PIC PTR	*	POINTER TO NEXT ENTRY
	03	PREVPTR	PIC PTR	*	POINTER TO PREVIOUS ENTRY
	03	LLENTRY	PIC X(?)	*	ACTUAL DATA IN LINKED LIST

# 4. Examples

None.

## 5. Copy-Books

None.

## 6. See Also

None.