```
1   FUNCTION  FindShelfByPartID  :  INT
2   VAR_INPUT
3       partIDToFind  :  STRING ( 23 ) ;              (* Part ID to search for *)
4   END_VAR
5   VAR_INPUT
6       shelfArray  :  ARRAY [ 1 .. 42 ]  OF  ShelfSpace ;   (* Array of shelf spaces *)
7   END_VAR
8   VAR
9       i  :  INT ;
10  END_VAR
11
```

```
1   FOR  i  :=  1  TO  42  DO
2         IF  shelfArray [ i ] . partID  =  partIDToFind  THEN
3             FindShelfByPartID :=  i ;
4             RETURN ;   (* Return shelf number if partID is found *)
5         END_IF ;
6     END_FOR ;
7     FindShelfByPartID :=  0 ;
8     RETURN  ;   (* Return 0 if partID is not found in any shelf *)
9
```