

# • C++:                   Aplicații ale algebrei booleene

.....

```
// We need some TRUE/FALSE masks to convert CCA_BOOL values to something
// that can be "anded" with the db field masks.
```

```
int BOOL_TRUE_MASK = 0xFFFFFFFF;
int BOOL_FALSE_MASK = 0x00000000;
int BOOL_MASK;
```

```
// Set the last connect time.
```

```
m_DbInMemory.device.tlast[deviceIndex] = theDevice->GetLastConnectTime();
```

```
// Set the in service flag. In the database and on the display it is
// Not In Service so it will be the opposite of the inservice? return.
```

```
if ( !theDevice->IsInService() )
    BOOL_MASK = BOOL_TRUE_MASK;
```

```
else
```

```
    BOOL_MASK = BOOL_FALSE_MASK;
```

```
m_DbInMemory.device.service[deviceIndex] = ( NIS_DEVICE & BOOL_MASK );
```

.....

```
byte NIS_GATE =                   {x, x, busy, close, open, x, off, x}
```

```
1. Testam on/off → Mask_OFF= {0, 0, 0, 0, 0, 0, 1, 0}
```

```
    if (NIS_GATE & Mask_OFF) {0, 0, 0, 0, 0, 0, 1/0, 0}
```

```
        TRUE - off=1
```

```
        FALSE- off=0
```

```
1. Daca e on -> e busy?
```

# Exemplu

```
! volatile byte NIS_GATE = {x, x, busy, close, open, x, off, x}
1. Testam on/off → Mask_OFF= {0, 0, 0, 0, 0, 0, 1, 0}
    if (NIS_GATE & Mask_OFF) {0, 0, 0, 0, 0, 0, 1/0, 0}
        TRUE - off=1
        FALSE- off=0
2. Daca e on -> e busy?
   Mask_BUSY= {
3. Daca nu e busy -> e open?
   Mask_OPEN= {
```

```
COD:
if (NIS_GATE & Mask_OFF)      //on?off    (1)
{
    //true -> este OFF
    //eroare
    ...
}
else
{
    //false - este ON (alimentata)
    if (NIS_GATE & Mask_BUSY)  //busy?    (2)
    {
        ...
    }
    else
    {
        ...
    }
}
}
```