**Class** Cell

**types**

**public** Player = **<White>** | **<Black>**;

**instance** **variables**

**public** y : **nat1**;

**public** x : **nat1**;

**public** piece: [Piece];

**inv** x **in** **set** {1,...,9} **and** y **in** **set** {1,...,9}

**operations**

**public** Cell: **nat1** \* **nat1** ==> Cell

Cell(xi,yi)== (**atomic**(x:=xi;y:=yi); piece:=**nil**);

**public** Cell: **nat1**\***nat1**\*Piece==>Cell

Cell(xi,yi,p)==(x:=xi;y:=yi;piece:=p);

**public** promotionZone: Player ==> **bool**

promotionZone(p) ==

**if** (p = **<White>** **and** y < 4)

**then** **return** **true**

**elseif** p = **<Black>** **and** y > 6

**then** **return** **true**

**else** **return** **false**;

**end** Cell