

$$W[B$$

$B' @ O @ B$
FCharacter

functions

public static

1. $AsDigit : \text{char} \rightarrow [\mathbb{Z}]$

$AsDigit(c) \triangleq$

cases $c :$

'0' $\rightarrow 0,$

'1' $\rightarrow 1,$

'2' $\rightarrow 2,$

'3' $\rightarrow 3,$

'4' $\rightarrow 4,$

'5' $\rightarrow 5,$

'6' $\rightarrow 6,$

'7' $\rightarrow 7,$

'8' $\rightarrow 8,$

'9' $\rightarrow 9,$

others $\rightarrow \text{nil}$

end;

public static

2. $AsDictOrder : \text{char} \rightarrow \mathbb{Z}$

$AsDictOrder(c) \triangleq$

let $DictOrderStr = 0123456789aAbBcCdDeEfFgGhHiIjJkKlLmMnNoOpPqQrRsStTuUvVwWxXyYzZ,$

3. $i = FStringIndex(c)(DictOrderStr),$

4. $undefinedSeq = 256$ in

cases true :

$(0 < i \wedge i \leq \text{len } DictOrderStr) \rightarrow i - 1,$

others $\rightarrow \text{undefinedSeq}$

end;

public static

3. $BDigit : \text{char} \rightarrow \mathbb{B}$

$BDigit(c) \triangleq$

$c \in \text{elems } 0123456789;$

public static

4. $LT : \text{char} \rightarrow \text{char} \rightarrow \mathbb{B}$

$LT(c1)(c2) \triangleq$

$AsDictOrder(c1) < AsDictOrder(c2);$

public static

5. $DE : \text{char} \rightarrow \text{char} \rightarrow \mathbb{B}$

$DE(c1)(c2) \triangleq$

$LT(c1)(c2) \vee c1 = c2;$

public static

6. $GT : \text{char} \rightarrow \text{char} \rightarrow \mathbb{B}$

$GT(c1)(c2) \triangleq$

$LT(c2)(c1);$

public static

7. $GE : \text{char} \rightarrow \text{char} \rightarrow \mathbb{B}$

$GE(c1)(c2) \triangleq$

$2LT(c1)(c2)$

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FCharT
functions
public static
8 run : () →  $\mathbb{B}$ 
   run ()△
   let testcases = [t1 (), t2 (), t3 ()] in
   FTestDriver‘run (testcases);

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9 t1 : () → FTestDriver‘TestCase
   t1 ()△
   run FTestDriver‘TestCase
   (3
   .FCharT01 : \t265705B57309265746570306B590963DB”, .let c = new FCharacter()

```

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10 t2 : () → FTestDriver‘TestCase
    t2 ()△
    run FTestDriver‘TestCase
    (3
    .FCharT02 : \t265875B57306E8F9E66F898065E8F30928FD43059”, .let c = new FCharacter()

```

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11 t3 : () → FTestDriver‘TestCase
    t3 ()△
    run FTestDriver‘TestCase
    (3
    .FCharT03 : \t265875B57306E59275C0F30926BD48F033059308B”, .let LT = FCharacter‘LT, .6   GT = FCharacter‘C

```