

3. Use of User-defined Data Types

Example – using user-defined data types

This pseudocode uses the user-defined type `Student`, `Season` and `TAddPointer` defined in the previous section.

```
DECLARE Pupil1 : Student
DECLARE Pupil2 : Student
DECLARE Form : ARRAY[1:30] OF Student
DECLARE ThisSeason : Season
DECLARE NextSeason : Season
DECLARE MyAddPointer : TAddPointer

Pupil1.Surname ← "Johnson"
Pupil1.Firstname ← "Leroy"
Pupil1.DateOfBirth ← 02/01/2005
Pupil1.YearGroup ← 6
Pupil1.FormGroup ← 'A'

Pupil2 ← Pupil1

FOR Index ← 1 TO 30
    Form[Index].YearGroup ← Form[Index].YearGroup + 1
NEXT INDEX

ThisSeason ← Spring
MyAddPointer ← ^ThisSeason
NextSeason ← MyAddPointer^ + 1
// pointer is dereferenced to access the value stored
// at the address
```

Past paper questions

Write pseudocode to create an enumerated type called `Parts` to include these parts sold in a computer shop:

Monitor, CPU, SSD, HDD, Laser Printer, Keyboard, Mouse

```
TYPE Parts = (Monitor, CPU, SSD, HDD, LaserPrinter, Keyboard, Mouse)
```

Write pseudocode to create a pointer type called `SelectParts` that will reference the memory location in which the current part name is stored.

TYPE SelectParts = ^Parts
