

Monday 3 November

Programming Assignment 07: due Wednesday 5 November

### Class Activity 20:

#### Objectives:

Learn about function prototype/calling statement agreement.  
Simple trace through functions.

#### Activity 1:

Given the following function prototypes

```
int  Middling( int Int1, int Int2 );
int  Done( void );
float Distance( float X, float Y, float Z );
void Simple( float Alfa, float Beta,
             float *pGamma, int *pSimpleFlag );
void Complex( int SmallInt, int LargeInt,
              float FirstReal, int SecondReal,
              int *pBiggestInt, float *pMidReal );
void QuadRoot( float A, float B, float C,
               float *pX1, float *pX2 );
void MakeAMove( int OldX, int OldY,
                int *pNewX, int *pNewY );
```

and the following variable declarations in main

```
float Alfa, Beta, Gamma;
float X, Y, Z;
int Uno, Dos, Tres;
float X1, X2;
int IntX, IntY;
int ResultsOK, DoneFlag; // logical flags
```

which of the following are legitimate calls to subprograms from the control subprogram? If a call is not legitimate, state why.

- (a) `Simple( Alfa, Beta, Gamma, &ResultsOK );`
- (b) `Done( ) = DoneFlag;`
- (c) `Int1 = Middling( Int1, Int2 );`
- (d) `Alfa = Distance( X, Y, Z );`
- (e) `Complex( Uno, Dos, &Alfa, &Beta, &Int1, &Gamma );`
- (f) `X1 = Middling( Uno, Dos );`
- (g) `QuadRoot( X, Y, Z, X1, X2 );`
- (h) `Complex( Int1, Middling(Int1,Int2), X1, X2, Tres, &Beta );`
- (i) `DoneFlag = Done;`
- (j) `MakeAMove( 1, 45, &Tres, &Dos );`

