**Requirements:**

A floppy diskette is required for storing programs.

The following programs should be typed in as an exercise in seeing how Flow Control programs work, and the use of their programs.  At the end of the programs to be typed in are exercises that you should complete to help you better understand the programming instructions listed below.

**Program 2.5: - General Summary**

```
' Program:
'
' Author:
' Class:
'
' Purpose:
' This is a guessing game program to highlight the use of
' where the user tries to guess a secret number
'
' (a) Start
' Declare variables
CONST maxNumb = 100      ' The biggest number
CONST minNumb = 1        ' The smallest number

DIM guess AS INTEGER     ' The guess
DIM numb AS INTEGER      ' The secret number
DIM nguesses AS INTEGER  ' The number of guesses
DIM quitNumb AS INTEGER  ' The number the user can use to
Quit

' Generate a random number for the user to guess
' Put the secret number into 'numb'
RANDOMIZE TIMER
numb = INT(RND * maxNumb) + minNumb
' Explain the game
'
CLS
PRINT "Number Guessing Game : Charley Alpha"
PRINT "I have picked a secret number between and includ-
ing"; minNumb; "and"; maxNumb
PRINT "How many times will it take you to guess the num-
ber?"
PRINT "If you want to give-up at any time, just enter";
quitNumb
```

```
nguesses = 0
DO
    nguesses = nguesses + 1
    PRINT "Guess #:"; nguesses;
    INPUT guess
    SELECT CASE guess
    CASE IS > numb
        PRINT "Too high"
    CASE IS < numb
        PRINT "Too Low"
    CASE ELSE
        ' They got it so we should be going out soon
        PRINT "hmmmm"
    END SELECT
LOOP UNTIL guess = numb OR guess = quitNumb

PRINT
IF guess = numb THEN
    PRINT "Congratulations"
    IF nguesses < 10 THEN
        PRINT nguesses; "guesses is real fast smart one. ";
    END IF
    PRINT "You got it"
ELSE
    PRINT "Quitter !"
END IF
'   STOP
```

**IA Project 2 & 3**