**Homework 9**

**Note: The first four questions of this homework must be done**

**作業前四題一定要做**

**1. Write a subroutine order:**

**n1 n1**

order

**n2 n2**

**n1, n2 : call by address**

**After the calling and execution of order:**

**The smaller of its two argument values is stored in its first actual parameter**

**and the larger is stored in its second actual parameter.**

**2. Write a subroutine sumavg that has three type double input parameters n1, n2, n3 and two output parameters sump, avgp.**

sumavg

**n1 sump**

**n2 avgp**

**n3**

**(Actually subroutine sumavg has five parameters:**

**n1, n2, n3: passed by value**

**sump, avgp: passed by address)**

**The subroutine computes the sum and average of its three input arguments.**

1. **Write a subroutine separate:**

**signp**

**output**

**parameters**

( ***all*** ***pass by address*** )

separate

**num wholep**

**(input parameter) frap**

***pass by value***

**Function separate finds the sign, whole number magnitude, and fractional parts of its input parameter num. (可使用math.h 之function)**

**Prototype for separate:**

**void separate( double num, // input value to be split**

**char \* signp, // output -- sign of num**

**int \* wholep // output – whole number magnitude of num**

**double \* fracp) // output – fractional part of num**

1. **Write a program for an Automatic Teller Machine that dispenses money.(發錢功能)**

**The user should enter the amount desired( a multiple of 10 dollars, 10元的倍數)**

**and the machine dispenses this amount using the least number of bills.**

**The bills dispensed are 50s, 20s, and 10s. Write a function that determines how many of each kind of bill to dispense.**

1. **Write a function that translates the amount of Arabic number into Chinese representation:**

**EX1: 7609802 ------ 柒佰陸拾萬玖仟捌佰零貳元整**

**EX2: 1009040300 -----拾億零玖百零肆萬零三佰元整**