PROJECT 2: COP2334 2/26 TO 2/28 GROUP OF 2 TO 3 MEMBERS

1.

Order Status

The Middletown Wholesale Copper Wire Company sells spools of copper wiring for \$100 each and ships them for \$10 apiece. Write a program that displays the status of an order. It should use two functions. The first function asks for the following data and stores the input values in reference parameters.

- The number of spools ordered.
- The number of spools in stock.
- Any special shipping and handling charges (above the regular \$10 rate).

The second function receives as arguments any values needed to compute and display the following information:

- The number of ordered spools ready to ship from current stock.
- The number of ordered spools on backorder (if the number ordered is greater than what is in stock).
 - Total selling price of the portion ready to ship (the number of spools ready to ship times \$100).
 - · Total shipping and handling charges on the portion ready to ship.
 - · Total of the order ready to ship.

The shipping and handling parameter in the second function should have the default argument 10.00.

```
/* SAMPLE RUN RESULTS
How many spools were ordered? 5
How many spools are in stock? 3
Amount of any special shipping charges (per spool)
above the regular $10.00 per spool rate (0 for none): 0
*** Order Summary ***
Spools ordered :
Spools in this shipment:
                            3
Spools back ordered:
Charges for this shipment
______
Spool charges:
                   $ 300.00
Shipping charges: $ 30.00
Total this shipment: $ 330.00
* /
```

Overloaded Hospital

Write a program that computes and displays the charges for a patient's hospital stay. First, the program should ask if the patient was admitted as an in-patient or an out-patient. If the patient was an in-patient the following data should be entered:

- · The number of days spent in the hospital
- · The daily rate
- Charges for hospital services (lab tests, etc.)
- · Hospital medication charges.

If the patient was an out-patient the following data should be entered:

- Charges for hospital services (lab tests, etc.)
- · Hospital medication charges.

Use a single, separate function to validate that no input is less than zero. If it is, it should be re-entered before being returned.

Once the required data has been input and validated, the program should use two overloaded functions to calculate the total charges. One of the functions should accept arguments for the in-patient data, while the other function accepts arguments for outpatient data. Both functions should return the total charges.

```
/* SAMPLE RUN RESULTS
This program will compute patient hospital charges.
Enter I for in-patient or O for out-patient: i
Number of days in the hospital: 2
Daily room rate: $640
Lab fees and other service charges: $720
Medication charges: $210
******
Hospital Billing Statement
******
            $ 1280.00
Room charges
Lab & Services $ 720.00
Medication $ 210.00
Total charges $ 2210.00
*****
* /
```