## Exercise 1: Functions

1. Create a new directory with the name "Lab04" inside "CSC215"
2. Write the program "ex1.c" that:

Calculates the bill for customer purchases in a store. In this store, the items have IDs ranged from 1 to 100. These items are organized in a way that items with IDs less than 50 are on sale (10%), and items with IDs between 50 and less than 90 are on sale (20%), the rest items are on sale = (30%).

Your program has a function called **salePrice** that receives the itemID and its price, it returns the

current price after sale for the current item, and it prints the number of items purchased so far. itemID is of type int and the price is of type double.

In your main, you should read item IDs and call SalePrice function for each item. Your program should continue to read item IDs till the end of purchases. Entering 0 will indicate the end of the purchases. At the end of your program, the total sale price is shown.

Hint: You may need to declare a static variable in salePrice Function!

Sample Run:

Enter ItemID or zero to End  
1  
Enter price for this item  
100  
The sale Price for this item is 90.000000

Number of items so far is 1   
Enter ItemID or zero to End  
60  
Enter price for this item  
120  
The sale Price for this item is 96.000000

Number of items so far is 2   
Enter ItemID or zero to End  
0  
Total price is = 186.000000

## 

## Lab assignment:

Write a C program assignment.c that calculates the average of a group of 4 test scores, where the lowest score in the group is dropped. Your program should use the following functions:

* Function **Avg** that calculates and displays the average of the three highest scores. This function should be called just once by the main, and should be passed the four scores.
* Function **findLowest** that finds and returns the lowest of the four scores passed to it. It should be called by Avg, which uses the function to determine which of the four scores to drop.

#include <stdio.h>  
  
int noi = 0;  
  
int main(){  
  
   float salePrice(int itemID , float price){  
     float discount=0;  
     float pridis=0;  
     float pad=0;  
     if(itemID<50){  
         discount=0.1;  
         pridis=price\*discount;  
         pad=price-pridis;  
     }  
       
     if(itemID>=50&&itemID<90){  
         discount=0.2;  
         pridis=price\*discount;  
         pad=price-pridis;  
     }  
       
     if(itemID>90){  
         discount=0.3;  
         pridis=price\*discount;  
         pad=price-pridis;  
     }  
     noi++;  
     return pad;  
 }  
  
  int f = 1;  
  float total = 0;  
  do{  
    puts("Enter ItemID or zero to End: ");  
    scanf("%d", &f);  
    if(f == 0){  
        break;  
    }  
    puts("Enter price for this item: ");  
    float pr = 0;  
    scanf("%f", &pr);  
  
    float SP =   salePrice(f,pr);  
      
    total = total + SP;  
  
    printf("The sale Price for this item is %f\n", SP);  
    printf("Number of items so far is %d\n" , noi);  
  
  
  }  
  while(f != 0);  
  
  printf("Total price is =  %f\n", total);  
  return 0;  
}