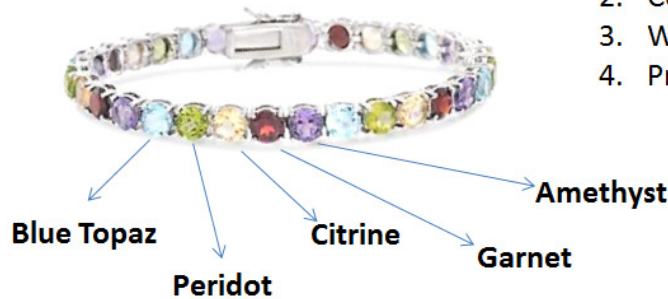


CS 215 Programming Assignment – Linked Lists using Pointers and Nodes

Rainbow Bracelet



Properties for Each Stone:

1. Name of the Stone
2. Color of the Stone
3. Weight of the Stone
4. Price of the Stone

Implement a program in C++ that does the following:

1. uses a data structure implementing pointers and stores information about the above 'Rainbow Bracelet'
2. Reads data about the bracelet from the user
3. Must be able to read data about as many gems as the user wants
4. Displays all the information about the 'Rainbow Bracelet' with the correct order of gems
5. Calculates and displays the total Gem Weight in Carats (Ct.)
6. Calculates and displays the total Price of the Bracelet (in US \$)

NOTE: Comment the code profusely

Keep proper Indentation

Use pointers

Use struct

Use the class discussion and notes on creating the dynamic linked list and the following code for the deleteltem method.

Modify the struct and customize it to suit to this stone (bracelet) data

Modify the methods by adding necessary statement to suit to this stone (bracelet) data

```

void deleteItem()
{
    if(front == NULL)
    {
        cout<<"There are no Customers at all" << endl;
    }//end of outer if
    else
    {
        itemType existingItem;
        cout<<"Enter the lastname of the customer to be deleted: ";
        cin>>existingItem;
        bool found = false;
        nodeptr location = front;
        nodeptr tempPtr = location;
        bool moreToSearch = (location != NULL);
        while(!found)
        {
            if(location->item != existingItem)
            {
                tempPtr = location;
                location = location->next;
                moreToSearch = (location !=NULL);
            }//end of inner if
            else
            {
                found = true;
                tempPtr->next = location ->next;
                if(tempPtr->next == NULL)
                    rear = NULL;
                delete location;
            }//end of inner else
        }//end of while
    }//end of outer else
} //end of delete items

```