

CS 161 - Final Programming Assignment

You have been hired by Mt. Hood Ski Tours to create a program that lets clients place orders for tours. The user should be presented with a list of possible tours, get the user's name(s), get the tour to be ordered and the number of people who will attend. After inputting as many tour orders as desired, a bill will appear for each order placed.

Specifications:

- Tour names should be held in a string array.
- Prices should be held in a float array.
- The name of the person responsible for each order is stored in a string array.
- The number of people attending will be stored in an integer array.
- The tour choice for each order will be stored in an integer array.
- The first 2 arrays listed above will hold 5 values.
- The last 3 arrays listed above will hold up to 10 values, but will fill with only as many values as needed.
- There should be **void** functions that do the following:
 - set up the tours, filling the tours and prices arrays
 - displaying a menu of tour options
 - getting the choice of tour for an order (until 0 is entered or 10 tours have been ordered)
 - getting the name of the person responsible for each tour order
 - getting the number of guests
 - displaying a bill that shows the person who ordered, the tour ordered, the number of people attending, the price per person, and the total cost
- The only global values should be the size of the arrays (2 different constants).
- The display should be clearedYour program should include **for** loops, **do...while** loops for data validation, an **if** structure to break out of the loop that processes orders, pass by reference functions, and parallel arrays.
 - after the input of the tours & prices
 - after the user has placed all orders
 - between each bill displayed

NOTE: While this is intended to cover all concepts of the course, there is no **while** loop, no **switch** structure, and no use of data files. BE SURE YOU REVIEW THESE, TOO!

SAMPLE RUN:

when program begins...

```
MT. HOOD SKI TOURS

Enter the name of the tour: Timberline Lodgepole Pine Schussing
Enter the price for Timberline Lodgepole Pine Schussing: 145.49
Enter the name of the tour: Cooper Spur Heliskiing
Enter the price for Cooper Spur Heliskiing: 250.00
Enter the name of the tour: Skibowl Ski Bowling
Enter the price for Skibowl Ski Bowling: 17.50
Enter the name of the tour: Summit Superpipe
Enter the price for Summit Superpipe: 20.00
Enter the name of the tour: Meadows Cross-Country Meander
Enter the price for Meadows Cross-Country Meander: 45.95
```

screen clears

menu displayed and orders taken...

```
MT. HOOD SKI TOURS

1 - Timberline Lodgepole Pine Schussing
2 - Cooper Spur Heliskiing
3 - Skibowl Ski Bowling
4 - Summit Superpipe
5 - Meadows Cross-Country Meander
0 - finished entering orders

Enter the number of the tour you would like: 2
What is your name? Pam
How many people will come? (1-10) 2
Enter the number of the tour you would like: 10
Enter the number of the tour you would like: 3
What is your name? Trent
How many people will come? (1-10) 5
Enter the number of the tour you would like: 0
```

screen clears

display one bill at a time...

```
MT. HOOD SKI TOURS

Customer:      Pam
Your tour:     Timberline Lodgepole Pine Schussing
# Guests:      2
Price each:    145.49

TOTAL:         290.98
Press Enter to see the next bill...
```

screen clears

```
MT. HOOD SKI TOURS  
  
Customer:      Trent  
Your tour:     Cooper Spur Heliskiing  
# Guests:      5  
Price each:    250.00  
  
TOTAL:         727.45  
Press Enter to see the next bill...
```

program ends.