

Chapter 6 – Extra Practice

Extra Practice

Extra practice is for those who would like to do some extra practice projects to further hone their skills learned in each assignment. There are no additional points to be gained by completing these projects.

Wizard Inventory

Create a program that keeps track of the items that a wizard can carry.

```
The Wizard Inventory program

COMMAND MENU
show - Show all items
grab - Grab an item
edit - Edit an item
drop - Drop an item
exit - Exit program

Command: show
1. wooden staff
2. wizard hat
3. cloth shoes

Command: grab
Name: potion of invisibility
potion of invisibility was added.

Command: grab
You can't carry any more items. Drop something first.

Command: show
1. wooden staff
2. wizard hat
3. cloth shoes
4. potion of invisibility

Command: edit
Number: 1
Updated name: magic wooden staff
Item number 1 was updated.

Command: drop
Number: 3
cloth shoes was dropped.

Command: exit
Bye!
```

Specifications

- Use a list to store the items. Provide three starting items.
- The wizard can only carry four items at a time.
- For the edit and drop commands, display an error message if the user enters an invalid number for the item.
- When you exit the program, all changes that you made to the inventory are lost.

Contract Manager

Create a program that a user can use to manage the primary email address and phone number for a contract.

```
Contact Manager

COMMAND MENU
list - Display all contacts
view - View a contact
add - Add a contact
del - Delete a contact
exit - Exit program

Command: list
1. Guido van Rossum
2. Eric Idle

Command: view
Number: 2
Name: Eric Idle
Email: eric@ericidle.com
Phone: +44 20 7946 0958

Command: add
Name: Mike Murach
Email: mike@murach.com
Phone: 559-123-4567
Mike Murach was added.

Command: del
Number: 1
Guido van Rossum was deleted.

Command: list
1. Eric Idle
2. Mike Murach

Command: exit
Bye!
```

Specifications

- Use a list of lists to store the data for the contracts. Provide starting data for two or more contracts.
- For the view and del commands, display an error message if the user enters an invalid contract number.
- When you exit the program, all changes that you made to the contract list are lost.

Quarterly Sales

Create a program that gets quarterly sales from a user and calculates the total of all four quarters as well as the average, lowest, and highest quarters.

```
The Quarterly Sales program

Enter sales for Q1: 12312.57
Enter sales for Q2: 15293.21
Enter sales for Q3: 14920.95
Enter sales for Q4: 23432.21

Total:                65958.94
Average Quarter:      16489.74
Lowest Quarter:       12312.57
Highest Quarter:      23432.21
```

Specifications

- Use a list to store the sales for each quarter.
- Round the results of each entry to a maximum of 2 decimal digits.