Overview

GOLD! GOLD! GOLD!

The news that gold was found at Sutter's Mill, in nearby Coloma, has echoed like a cannon across Sacramento, California, and the World itself.

As a result, people beginning to trickle into Sacramento, buying supplies, and heading to seek their fortunes in the Sierra Nevada.

You have decided to join them. Filled with the spiraling emotions of excitement and fear, you find yourself in a general store. It's time to spend your hard-earned money to spend your hard-earned money to prepare for – what seems like – a wild adventure.

You step up to the counter and make order from, the rather talkative, clerk Mr. Blabbers.

Your Task

You are going to make a basic program that lets the user purchase an item at the General Store. The user will select an item, pay, and receive change. For this lab, you are going to implement a Switch Statement.

Have fun!

You can come up with your own theme. You don't have to use mine. Use your imagination!

- Cat items

- Dog items

- Rick and Morty items

- Pokemon items

- etc....

Example

Your solution <u>doesn't</u> have to look exactly like the example below. The user's input is printed in **blue**. The data outputted from your calculations is printed in **red**. You don't have to make the text that color in your program.

```
Good morning! On your way up the hill? What do you want?

1. Miner's Pan (171 cents)
2. Mountaineer's Map (85 cents)
3. Flint (34 cents)
4. Donkey (2294 cents)
5. Bowie knife (352 cents)


Enter your selection:
1

Ah, yes. You can't go without a pan!

How many cents did you give the clerk?
200

Your change is 29 cents. Good fortune to you.
```

Requirements

⚠	**This activity may only be submitted in Intel Format.**
	Using AT&T format will result in a zero. Any work from a prior semester will receive a zero.

You <u>must</u> think of a solution on your own. The requirements are as follows:

1. Display a menu of items and costs. You must have (at least) five. The last one should cost zero – which will let the user get back their money. Make sure to also print a name for your vending machine.

2. Input their selection

3. Use a Switch Statement to both get the price and to display a comment from the clerk.

   Using a table (which we haven't covered yet) will result in a zero on the lab.

4. Input how much student you gave the clerk.

5. Calculate and output their change to the screen.

Submitting Your Lab

To submit your lab, you must run Alpine by typing the following and, then, enter your username and password.

```
alpine
```

To submit your lab, <u>send the assembly file</u> (do <u>not</u> send the a.out or the object file to:

```
dcook@csus.edu
```

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UNIX Commands

Editing

Action	Command	Notes
Edit File	**nano** *filename*	"Nano" is an easy to use text editor.
E-Mail	**alpine**	"Alpine" is text-based e-mail application. You will e-mail your assignments it.
Assemble File	**as –o** *object source*	Don't mix up the *objectfile* and *asmfile* fields. It will destroy your program!
Link File	**ld –o** *exe object(s)*	Link and create an executable file from one (or more) object files

Folder Navigation

Action	Command	Description
Change current folder	**cd** *foldername*	"Changes Directory"
Go to parent folder	**cd ..**	Think of it as the "back button".
Show current folder	**pwd**	Gives the current a file path
List files	**ls**	Lists the files in current directory.

File Organization

Action	Command	Description
Create folder	**mkdir** *foldername*	Folders are called directories in UNIX.
Copy file	**cp** *oldfile newfile*	Make a copy of an existing file
Move file	**mv** *filename foldername*	Moves a file to a destination folder
Rename file	**mv** *oldname newname*	Note: same command as "move".
Delete file	**rm** *filename*	Remove (delete) a file. There is **no** undo.