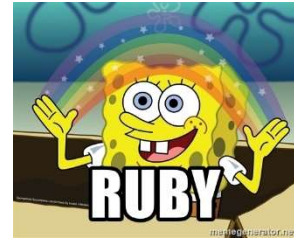# CS 451
Programming Assignment
Pet: Ruby

Due 4/30

Goal
The goal of this assignment is to get acquainted with the programming language Ruby by creating a program that maintains a very simple database.

Problem Statement:
You want to keep track of your movie collection. Movies are added with their rating and their prices; these two values are integers. You only have to modify the two files provided: `main.rb` and `store.rb`

Analysis:
The database supports the following operations:
`add` adds a new movie
`update` updates the rating or price of a movie based on the user's choice
`display` displays the entire database
`remove` removes a chosen movie
`four` does a special action based on a movie having a rating of 4
`quit` quits the program

Design:
There are many ways of accomplishing a task in Ruby (which makes it great 😊), so I will leave some of the control flow design up to you.
I do have some requirements:
- The database is a `hash` with an `array ([rating, price])` as the value
- The keys of the hash need to be translated from a string to a symbol
- The program continues until the user enters 'quit'
- When the user enters an operation, it is not case-sensitive, but movies should be entered exactly how they were added
- You have to use a `proc` for the `four` operation. However, I leave it up to you for what you want the `proc` to do for the movies that have the rating of 4. But, you can't use the one that I have provided.
- **You cannot use for-loops**

What to hand in
(1)   Email your Ruby code to adsantos@loyola.edu with <your name>main.rb and <your name>store.rb
(2)   A well-formatted 2-up printout of your source code. You may use:
```
a2ps -T 4 -q -Avirtual -2 -o ./src.ps ruby.rb
```

Assignment Notes:

(1) To run your Ruby programs simply type `ruby <progam.rb>`

(2) You can assume that the user input for the rating and prices are valid, i.e., I don't require input checking for when the rating is > 4 or if the ratings and prices are less than 0. But, it would be great to have it in a real database!

(3) Helpful links:
- a. https://www.codecademy.com/articles/glossary-ruby
- b. http://ruby-doc.com/docs/ProgrammingRuby/
- c. https://www.ruby-lang.org/en/
- d. http://rubylearning.com/satishtalim/tutorial.html

(4) You could also reference `ruby_guide.rb` that I have made as a quick cheatsheet.

Example Run (To Test)
Personal Movie Store
What would you like to do?
-- Type 'add' to add a movie.
-- Type 'update' to update a movie.
-- Type 'display' to display all movies.
-- Type 'remove' to remove a movie.
-- Type 'four' for a surprise.
-- Type 'quit' to quit.
add
What movie do you want to add?
Snow White
What is the rating? (Type a number 0 to 4)
0
What is price do you want to sell it at? (Type an integer)
8
Snow White has been added with a rating of 0 and with a price of 8.
----
add
What movie do you want to add?
Tangled
What is the rating? (Type a number 0 to 4)
3
What is price do you want to sell it at? (Type an integer)
10
Tangled has been added with a rating of 3 and with a price of 10.
----
display
Snow White-> rating: 0 | price: 8
Tangled-> rating: 3 | price: 10
----
update
What movie do you want to update?
Tangled
Did you want to change the rating or price?
rating
What's the new rating? (Type a number 0 to 4)
4
Tangled has been updated with the new rating of 4.
----
add
What movie do you want to add?
Spongebob Movie
What is the rating? (Type a number 0 to 4)
4
What is price do you want to sell it at? (Type an integer)

15
Spongebob Movie has been added with a rating of 4 and with a price of 15.
----
display
Snow White-> rating: 0 | price: 8
Tangled-> rating: 4 | price: 10
Spongebob Movie-> rating: 4 | price: 15
----
four
Tangled is MINE!
Spongebob Movie is MINE!
----
remove
What movie do you want to remove?
Snow White
Snow White has been removed.
----
display
Tangled-> rating: 4 | price: 10
Spongebob Movie-> rating: 4 | price: 15
----
exit
Sorry, I don't understand you.
-- Type 'add' to add a movie.
-- Type 'update' to update a movie.
-- Type 'display' to display all movies.
-- Type 'remove' to remove a movie.
-- Type 'four' for a surprise.
-- Type 'quit' to quit.
quit
Aww...bye bye!