* **Compute Q value from value:**

Chart, scatter chart

Description automatically generated with medium confidence

* **Compute action from values**
  + Attempt #1:

Text, letter

Description automatically generated

* + Error #2: indexing error with self.values
  + Attempt #2:

Text, letter

Description automatically generated

* + Fixed Error #2 – error was caused by error #1, was trying to determine the best route of all Q values in this function, instead of in RunValueIteration
  + Error #3: compute action from value is returning V values instead of actions, might need another data structure to hold the optimal move
  + Attempt #3:

Graphical user interface, text, application

Description automatically generated

* + Fixed Error #3 – had to make a new member variable that would hold the optimal move for each state depending on the optimal Q values and implement an argmax function
    - Source: Stanford AI MDP YouTube video
* **Run value iteration** 
  + Attempt #1:

Text, letter

Description automatically generated

* Error #1: indexing error with the Counter nextValues
* Attempt #2:

A picture containing chart

Description automatically generated

* Fixed Error #1 – only need to index the values Dict by the state and find the max by iterating over the actions
* qLearning member variables

Text

Description automatically generated

* Get Q Value:

Text

Description automatically generated

* Qlearning Compute Value From Q Values:Graphical user interface, text

  Description automatically generated
* Get Action:

Text

Description automatically generated

* Update:

Text

Description automatically generated