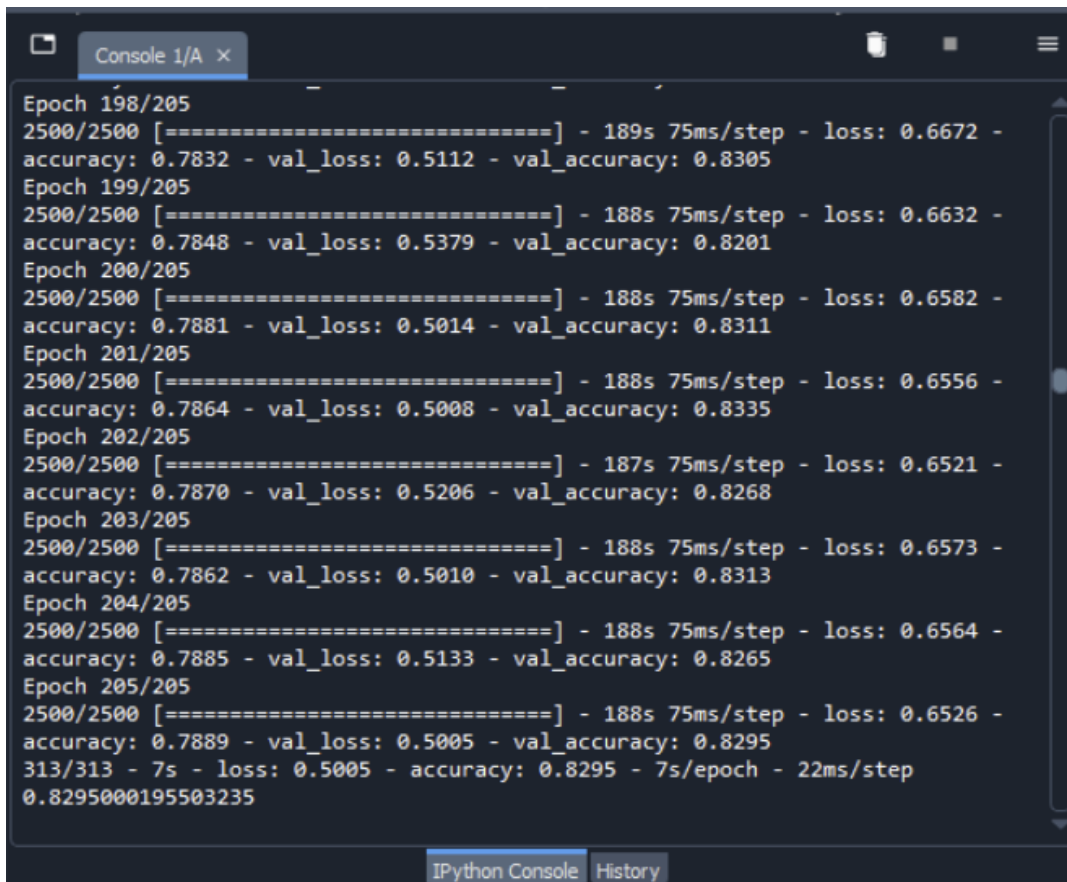


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SJSU EE104
Spring 2023
Due: 4/9/2023

Lab #6

Convolutional Neural Network: <https://youtu.be/fZ2k5hJBsmQ>



```
Epoch 198/205
2500/2500 [=====] - 189s 75ms/step - loss: 0.6672 -
accuracy: 0.7832 - val_loss: 0.5112 - val_accuracy: 0.8305
Epoch 199/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6632 -
accuracy: 0.7848 - val_loss: 0.5379 - val_accuracy: 0.8201
Epoch 200/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6582 -
accuracy: 0.7881 - val_loss: 0.5014 - val_accuracy: 0.8311
Epoch 201/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6556 -
accuracy: 0.7864 - val_loss: 0.5008 - val_accuracy: 0.8335
Epoch 202/205
2500/2500 [=====] - 187s 75ms/step - loss: 0.6521 -
accuracy: 0.7870 - val_loss: 0.5206 - val_accuracy: 0.8268
Epoch 203/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6573 -
accuracy: 0.7862 - val_loss: 0.5010 - val_accuracy: 0.8313
Epoch 204/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6564 -
accuracy: 0.7885 - val_loss: 0.5133 - val_accuracy: 0.8265
Epoch 205/205
2500/2500 [=====] - 188s 75ms/step - loss: 0.6526 -
accuracy: 0.7889 - val_loss: 0.5005 - val_accuracy: 0.8295
313/313 - 7s - loss: 0.5005 - accuracy: 0.8295 - 7s/epoch - 22ms/step
0.8295000195503235
```

Epochs: 100
Batch Size: 25

Challenge Test: <https://youtu.be/ZpBuMuATwWM>

```
Prediction: This image most likely belongs to frog
1/1 [=====] - 0s 25ms/step

Prediction: This image most likely belongs to airplane
1/1 [=====] - 0s 25ms/step

Prediction: This image most likely belongs to automobile
1/1 [=====] - 0s 29ms/step

Prediction: This image most likely belongs to ship
1/1 [=====] - 0s 31ms/step

Prediction: This image most likely belongs to cat
```

Correct answers:

Frog

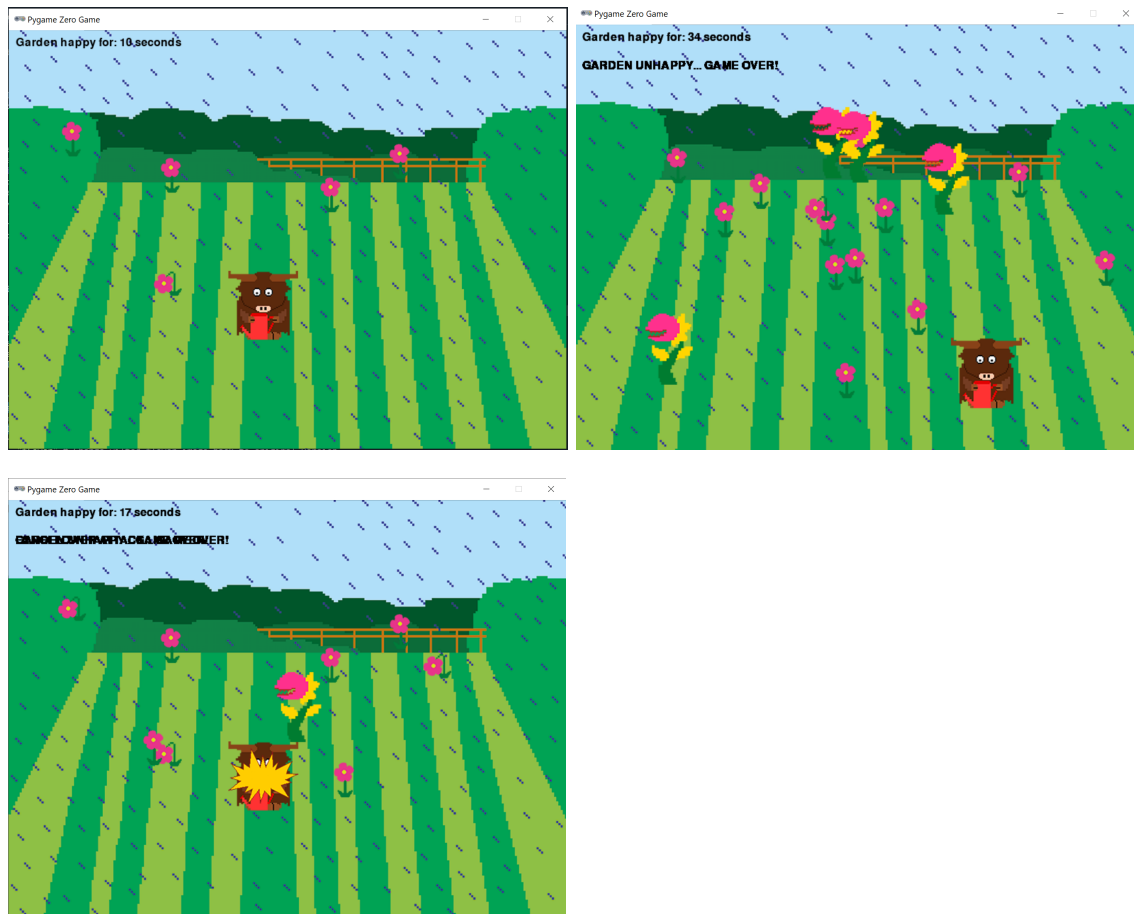
Airplane

Automobile

Ship

Cat

Game Development - Happy Garden: <https://youtu.be/vpNvIKB4JZg>



Hello World to OpenAI: <https://youtu.be/QZv9ujQC0DY>



Input something to name.

Generate names

Captain Pirate Hook, Captain Peg-Leg, Captain Cutlass, Captain Parrot

(Input was “Pirate”)

Hello World to ChatGPT: <https://youtu.be/KC2inFsIzok>

(Python file is in the openai-quickstart-python-master folder)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work  
  
A resistor is an electronic component that works  
by restricting the flow of electricity in a  
circuit. When electric current passes through a  
resistor, the resistor actively reduces the  
current flow, thereby converting some of the  
electrical energy into heat, which is dissipated.  
The amount of current that is allowed to pass  
through a resistor is determined by the  
resistance value of the resistor. This value is  
measured in ohms and is marked on the surface of  
the resistor. A higher resistance value results  
in a lower current flow, while a lower resistance  
value allows more current to pass through.  
Resistor types can also vary to achieve different  
resistance values.
```

(normal)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work  
  
A resistor works by providing a known resistance  
to the flow of electrons in a circuit.
```

(changing engine to text-davinci-002)

```
Enter your question (or type 'quitme' to quit):  
how do resistors work  
  
A resistor helps electric current to slowdown  
It also can make it weaker, so electric flow  
don't overblow.  
It's a fundamental component of the electric flow  
Protection from too much power, helps circuits to  
grow.
```

(changing prompt to “Answer {prompt} in rhymes”)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work
```

```
A resistor is a type of electrical component that  
is used to restrict the flow of current in an  
electrical circuit. It is made up of a conducting  
material, such as metal, that is wrapped around a  
non-conducting material, such as plastic. The  
resistance of the resistor is determined by the  
ratio of the conducting material to the non-  
conducting material. The higher the ratio of  
conductor to insulator, the higher the resistance  
of the resistor.
```

(changing max_tokens to 1028)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work
```

```
A resistor is an electrical component that  
resists the flow of electric current. It is made  
up of a conductive material, often metal, that  
has a known resistance. When an electric current  
passes through the resistor, the conductor  
resists the electric flow, causing part of the  
current to be converted into heat. The resistor  
then reduces the amount of electric current in  
the circuit and can be used to set a current  
limit or to divide voltages in a circuit.
```

(changing n to 2)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work
```

```
A resistor is an electronic component that  
resists the flo
```

(changing stop to “w”)

```
Enter your question (or type 'quitme' to quit):  
how does a resistor work
```

```
A resistor is an electrical component that  
resists the flow of electrical current. It works  
by creating a voltage drop across its terminals,  
which reduces the current flowing through the  
circuit. This is done by converting some of the  
electrical energy into heat energy, which is  
dissipated into the surrounding environment.
```

(changing temperature to 0.5)