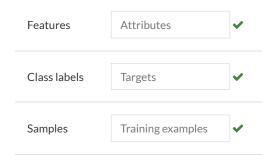
## Dashboard / My courses / 2223S / COSC-247-2223S / Thursday, February 16 / Quiz #2

Started on	Friday, February 17, 2023, 9:00 PM
State	Finished
Completed on	Friday, February 17, 2023, 9:17 PM
Time taken	17 mins
Points	10.00/10.00
Grade	<b>100.00</b> out of 100.00
Question <b>1</b> Correct 1.00 points out of 1.00	

Match terms that are used synonymously in machine learning literature.



Your answer is correct.

The correct answer is: Features  $\rightarrow$  Attributes, Class labels  $\rightarrow$  Targets, Samples  $\rightarrow$  Training examples

Question <b>2</b> Correct
1.00 points out of 1.00
If the training data for a perceptron is not linearly separable then:  Select one:  no testing data will be required.  no weight vector will produce an error of zero.  the learning rule will become nonlinear over time.  a division by zero exception will be raised.
<ul> <li>the perceptron learning algorithm is guaranteed to find a weight vector that is 100% correct.</li> </ul>
$\circ$ $\eta$ will go to infinity.
the "no free lunch theorem" will be violated.
<ul> <li>the myelin sheath will degrade.</li> <li>a high learning rate will be required.</li> </ul>
a high learning rate will be required.
Your answer is correct. The correct answer is: no weight vector will produce an error of zero.
Question 3
Correct
1.00 points out of 1.00
The output of a perceptron can be:  Select one:
a collection of clusters.
a Python dictionary.
only one of two predefined values. ✓
<ul><li>a 2-dimensional NumPy array.</li><li>a pulse train of any frequency.</li></ul>
$\bigcirc$ 0, $\pi/2$ , or $\pi/2$ .
<ul><li>any number that can be stored in a floating-point variable.</li></ul>
a pulse train with a frequency between 0.0 and 1.0.
any non-negative rational value.
any point in the complex plane.

The correct answer is: only one of two predefined values.

The design of perceptrons was inspired by:			
Select one:			
	unsupervised learning		
	Voltron		
	support vector machines		
	neurons♥		
	Persephone		
	deep neural networks		
	reinforcement learning		
	perspective		
	precipice dynamics		
	numpy and pandas		
	alpha-beta pruning		
	generative adversarial networks		
	the constructor method		
	the physical symbol system hypothesis		

Question **4**Correct

1.00 points out of 1.00

The correct answer is: neurons

Correct				
1.00 points out of 1.00				
In a perceptron, weights are updated:  Select one:				
only at initialization.				
● during learning. ✓				
according to height.				
using only negative values.				
in an unsupervised manner.				
<ul> <li>only after learning is complete.</li> </ul>				
in a pandas DataFrame.				
using a clustering algorithm.				
Your answer is correct.				
The correct answer is: during learning.				
Question <b>6</b> Correct				
1.00 points out of 1.00				
1.00 points out of 1.00				
Perceptrons are used for:  Select one:				
supervised learning     ✓				
<ul> <li>genetic algorithms</li> </ul>				
<ul> <li>classical conditioning</li> </ul>				
o minimax search				
oreinforcement learning				
deviant learning				
<ul> <li>unsupervised learning</li> </ul>				

 ${\sf Question}\, {\bf 5}$ 

The correct answer is: supervised learning

Question <b>7</b>	
Correct	
L.00 points out	of 1.00
"Cluster	ring" is a kind of:
Select o	one:
	inforcement learning
	abiased learning
	nsupervised learning♥
	pervised learning
Vour answ	ver is correct.
The correc	ct answer is: Unsupervised learning
Question <b>8</b>	
Correct	4400
1.00 points out	
Dawaant	
Percept	crons are used for:
Select o	one:
	ıstering
O reg	gression analysis
O rei	inforcement learning
	mbolic regression
cla	assification ✓

The correct answer is: classification

Question <b>9</b> Correct
1.00 points out of 1.00
In the perceptron learning rule, the Greek symbol η, sometimes written as "eta," is used for:  Select one:  the learning rate ✓  free lunch  the predicted class label  the true class label  the synaptic weight  the loss
Your answer is correct. The correct answer is: the learning rate
Question 10 Correct 1.00 points out of 1.00
In a perceptron, the learning rate is:  Select one:  always 1  always 0  set to the average feature value  a hyperparameter ✓  computed using the no free lunch theorem
Your answer is correct. The correct answer is: a hyperparameter
■ Code from class (perceptron and adaline)
Jump to

Perceptron Assignmer