

Day 3 Quiz

2.07.2024

- Q1.** What is the difference between the *classical* and *machine learning* approaches to artificial intelligence?
- Q2.** What are the two main types of machine learning and how are they different? **Bonus:** What is the third type we've talked about?
- Q3.** What is the Turing test?
- Q4.** If I write $x_1^{(4)}$, what value am I referring to? i.e. what do the x_1 and $^{(4)}$ represent?
- Q5.** What do I mean when I write $x_2^{(i)}$ and $y^{(i)}$?
- Q6.** What is the motivation for doing clustering?
- Q7.** In the k-means clustering algorithm, what does '**k**' represent?
- Q8*.** How does the k-means clustering algorithm work? Explain in as much detail as you can.
- Q9*.** Write down two limitations of the k-means algorithm.
- Q10*.** What is dimensionality reduction and what are the two reason we might want to do it?
-

* Hard question