Name: *Please type your name(s) here*

Mushroom Questions: There are 16 questions that can be found following a discussion of the various data analysis models.

**For each of the questions discuss how you arrived at your answer. What visuals/models were helpful? How sure are you of the answer? What were the probabilities that were obtained with the models? Screen shots are required, but you must include some discussion with them. Your analysis will be checked against your statements. Make sure it is correct. Incorrect analysis will not an acceptable reason for getting the answer wrong.**

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Question 1: SporePrintColor(Green) 🡪 Odor(**?**)

Discussion

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Question 2: StalkColorAboveRing(Yellow) 🡪 Odor(**?**)

Discussion

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Question 3: StalkSurfaceBelowRing(Scaly) 🡪 Habitat(**?**)

Discussion

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Question 4: RingNumber(0) 🡪 Habitat(**?**)

Discussion

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Question 5: RingType(Flaring) 🡪 Edible(**?**)

Discussion

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Question 6: Odor(Pungent) 🡪 Bruises(**?**)

Discussion

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Question 7: CapColor(Red) + SporePrintColor(Black) 🡪 Edible(**?**)

Discussion

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Question 8: Population(Clustered) + RingNumber(Two) 🡪 Habitat(**?**)

Discussion

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Question 9: GillColor(Red) 🡪 Habitat(**?**)

Discussion

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Question 10: CapColor(Pink) + GillSizeBoard(Yes) – Odor(**?**)

Discussion

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Question 11: GillColor(White) + StalkRoot(Equal) 🡪 Odor(**?**)

Discussion

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Question 12: CapShape(Sunken) + StalkRoot(Club) 🡪 Edible(**?**)

Discussion

If one were to ask for the edibility of a Mushroom that had a Sunken Cap Shape that also had a Stalk root that resembled a club, they wouldn’t be able to get an answer. The reason being that a mushroom with both of these attributes weren’t **documented or don’t exist**. In addition, both of those specific attributes on their own are extremely rare, with Clubbed shaped stalks making only 6.75% of the entire sample while Sunken caps being less than 1%.

Graphical user interface, chart

Description automatically generated

However, taking the probability of both these attributes and the probability of their Edibility, I could calculate that if the sample size were expanded enough the probability of such a mushroom would converge around **3.565%** while its edibility would be around **95%.**

Graphical user interface, application

Description automatically generated

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Question 13: What are the top 3 predictors of a mushroom being Edible**?**

Discussion

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Question 14: What are the top 3 predictors of where a mushroom lives**?**

Discussion

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Question 15: What are the top 3 predictors of whether a mushroom has bruises or not**?**

Discussion

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Question 16: If a mushroom has no odor, what three attributes of a mushroom could be used to help in determining whether or not the mushroom is edible**?**

Discussion