11.2) *Build a random forest to classify a mushroom as edible or poisonous based on its attributes.*

a) *Produce a class-confusion matrix for this problem.*

**Output:**

Accuracy score of the SVM: 1.0

Confusion matrix:

[[1066 0]

[0 965]]

|  |  |  |  |
| --- | --- | --- | --- |
| *Confusion Matrix:* | | Predicted | |
| Edible | Poisonous |
| Actual | Edible | 1066 | 0 |
| Poisonous | 0 | 965 |

a*) Continued. If you eat a mushroom based on your classifier’s prediction it is edible, what is the probability of being poisoned?*

It would be 0%, since the prediction is 100% accurate according to our model.