1- **What is the difference between overfitting and underfitting?**

Overfitting:

This happens when the model learns too much from the training data, including details and noise. The model performs very well on the training data but poorly on new data.

Underfitting:

This happens when the model doesn't learn enough from the training data and performs poorly on both the training data and new data because it can not capture the patterns.

2- **What do you know about Ensemble learning?**

Honestly, I don't know much about it

But from my search, I found out that it's a method where multiple models are combined to achieve the best possible result, instead of relying on a single model which might make mistakes.

3- **What is Random Forest and how does it work?**

It is a machine learning algorithm used in classification and regression tasks. It is an ensemble learning method that builds multiple decision trees during training and combines their outputs for improved accuracy and reduced overfitting.

4- **What do you know about backward propagation?**

It is an algorithm used to train artificial neural networks by updating the weights in the network to minimize the error. It is a component of supervised learning in deep learning models. It works for networks with many hidden layers and enables it to learn effectively.

- Codeforces problem A
- Codeforces problem B → I can not understand it right now and I do not wanna miss up the deadline, but I will try a gain later.