

Class Activity 1

Answer all questions and submit the answers in e-learning using your own hand writing.

Question 1

Translate the English sentences into propositional logic using a symbolized key.

1. If the party has delicious food and fun activities, the guests are happy.
2. We celebrate unless it's raining or the party is indoors.
3. The event is a success if and only if the guests are happy and there is music.
4. If the party goes late into the night, everyone is tired.
5. We have fun activities and listen to music when it's indoors or raining.
6. The party is a celebration if the guests are happy and there is delicious food.

Question 2

Convert the English sentences into standard predicate logic sentences.

1. Some students both enjoy coding and participate in hackathons.
2. Every student who is a computer science major and enjoys coding will either participate in hackathons or collaborate with classmates.
3. There exists a student who either excels in academics or actively participates in extracurricular activities.

4. Any student who does not enjoy coding will fail the final exam.

5. No student who fails the final exam will graduate with honors.