A coin is toss three times and the eight possible outcomes

HHH, HHT, HTH, THH, HTT, THT, TTH, TTT

are assumed to be equally likely with probability 1/8

Define

A= an H occurs on each of the first two tosses

B= T occurs in the third toss

D= two Ts occur in the three tosses

Q1: Are A and B independent?

Q2: Are B and D independent?