V1 wants to have at least 3 + c(v2, v1) after giving away f(v1, v3). In order for that to happen the f(v2, v1) has to equal to c(v2, v1). After the f(v2, v1) , v2 wants to end up with 1 in demand, meaning it needs a flow value of 4 to it self but that is impossible because the maximum flow to v2 is equal to c(v3, v2) => 2.