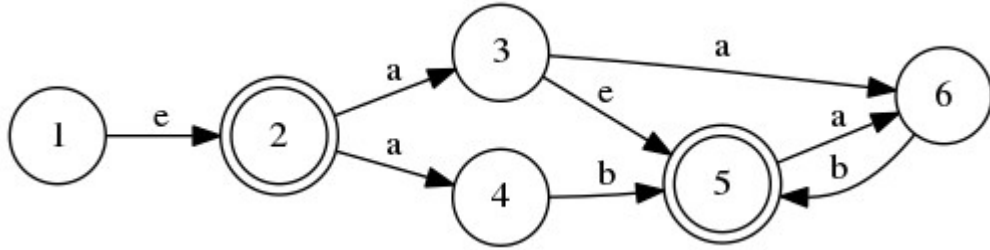


1) Consider the following NFA:



For each string, determine if the NFA accepts or rejects it.

- 1) aabab - **True**
- 2) a - **True**
- 3) aa - **False**
- 4) aaa - **False**
- 3) ab - **True**
- 4) "" - **True**

2) Run NFA → DA conversion using the powerset construction algorithm covered in lecture. Please provide some proof of your work, i.e. a table showing the results of the intermediate steps of the algorithm.

1	E-Closure: 1,2	
1,2	Move on a: 3,4	E-Close: 3,4,5
	Move on b: Nil	E-Close: Nil
3,4,5	Move on a: 6	E-Close: 6
	Move on b: 5	E-Close: 5
6	Move on a: Nil	E-Close: Nil
	Move on b: 5	E-Close: 5
5	Move on a: 6	E-Close: 6
	Move on b: Nil	E-Close: Nil

