Graphic Era (Hill University), Dehradun

Department of CSE
B.Tech., 4th Sem,
Even Semester (2023-24)
Assignment-1
Finite Automata and Formal Languages (TCS-402)

1	Construct a DFA that accepts strings of a's and b's having at least one b.
2	Construct a DFA that accept strings of a's and b's having exactly one a
3	Construct a DFA that accept strings of a's and b's ending with the string baa
4	Construct a DFA that accept strings of a's and b's which do not end with the string baa
5	Construct a DFA that accept strings of a's and b's having a substring bab
6	Construct a DFA having a substring 001 or 110
7	Construct a DFA that accept strings of a's and b's such that L={bwb | w ϵ $(a+b)^n$ where n>=0}
8	Construct a DFA that accept strings of 0's, 1's and 2's beginning with 0 followed by odd number of 1's and ending with 2
9	Construct a DFA that accept Language L={wbab | w ϵ {a, b}*}
10	Construct a DFA for the language L = {w | second symbol from right end of w is a}
11	Construct a DFA for the language L = {w | every a in w is followed by bb}
12	Construct a DFA's for the languages a) L = {w: |w| mod 3 = 0} on strings of a's and b's b) L = {w: |a| mod 3>|b|mod 2} on strings of a's and b's c) L= {w: |a| mod 3<|b|mod 2} on strings of a's and b's
13	Construct a DFA for the language L such that all strings have number of a's divisible by 4 or number of b's divisible by 3.
14	Construct a DFA that accept strings of even number of a's
15	Construct a DFA that accept strings of binary number divisible by 4.