**Assignment-2**

**Automata and compiler design lab**

1. Find the dfa that recognizes all strings on Σ={a,b} with prefix ab.
2. Find a dfa that accept all strings on {0,1} except those containing the substring 001.
3. Find a dfa for language L={w: every no of ‘a’ has length 2 or 3} on Σ={a,b}
4. Find the dfa’s for the following languages on Σ={a,b}
5. L={w:|w|mod 3=0}
6. L={w:|w|mod 5≠0}
7. L={w:na(w)mod 3>1}
8. L={w:na(w)mod 2=0 and w:nb(w)mod 2=0}
9. L={w:(na(w)-nb(w)) mod 3>0}
10. L={w:(na(w)+2nb(w)) mod 3<2}
11. L={w:na(w)mod 3>nb(w) mod 3}
12. Write a C program to implement dfa.