Automata and Compilers Lab
Week-2

(1)Write an efficient code to check whether a string is palindrome or not.

(2)Write separate programs to implement the DFA corresponding to the languages represented by following regular expressions

(i) $a(ab)^{+}a$

L= {aaba , aababa,.....} or strings starting and ending with ‘a‘ and having sequence of ab’s in between for at least one time.

(ii) a*b*

L={a,aa,aaa,....., b,bb,bbb,.....,ab,abb,aabb,.....} or strings having any number of a’s followed by any number of b’s

(iii) a(a+b)*+ba(a+b)*

L={a,ab,aa,……, ba,baa,bab…..} or strings starting with either a or ba

(iv) (0+1)*0(0+1)*0 (0+1)*

L={00,10101,.....} or strings containing at least two 0’s.

(v) $(11*0+0)(0+1)*0^{*}1^{*}$

L={0,110,.....} or strings starting with 0 or $11^{*}0$.

(vi) $(0+1)^{*}00$

L={00,100,000,....} or strings ending with 00.