5. How many tokens are there in the following C statement? (1 M) printf (“j=%d, &j=%x”, j,&j)
(A) 4 (B) 7 (C) 8 (D) 15

Construct the transition diagram for keywords (1 M)
he, she, his, hers, he, me

---

7. Minimize the DFA given below. **(2 M)**

δ	a	b
→ q0	q1	q0
*q1	q1	q2
q2	q3	q2
*q3	q3	q4
q4	q5	q4
*q5	q5	q0

9. Construct a PDA to accept strings containing equal number of a's and b's. (2 M)

6. Design a NFA to accept strings over {0,1} containing either 101 or 110 as substring. Convert the same to a DFA. (2 M)

3. How many tokens are there in the following C statement? (1 M)
if (a<b) printf(“the value”, m);
(A) 12 (B) 10 (C) 8 (D) 15

7. Give the regular expression for the following languages consisting of: (1 M)
ii) Strings containing atmost one pair of consecutive a's

Design a PDA to accept the language {0m1 n 0 m | m,n>1}