1)  $L = \{a^n b^m a^n \mid m, n > 0\}$ 

2)  $L = \{a^n b^m c^m d^{2n} \mid m, n \ge 0\}$ 

3) Odd length palindromes over {a, b}

4)  $L = \{a^n b^m \mid 0 \le n \le m \le 2n\}$ 

5)  $L = \{a+b^*\}$ 

6) Strings over {a, b} that contain exactly 2 b's

7) Strings over {a, b} that contain at least 2 b's

8) Even length strings over {a, b}

9) Strings over {a, b} with even number of b's

10) Strings with even number of a's and b's

11) Strings with even number of a's and odd number of b's

12) Strings with odd number of a's and even number of b's

13) Strings with odd number of a's and b's

14) Strings over {a, b, c} that do not contain abc as substring

15) Strings with  $n_a(w) = n_b(w)$ 

16) Strings without ba as substring

17)  $L = \{0*1(0+1)*\}$ 

18)  $L = \{(011+1)*(01)*\}$ 

19)  $L = \{a^n b^n \mid n > 0\}$ 

20)  $L = \{a^n b^n c^m | m, n > 0\}$ 

21)  $L = \{a^nb^n c^m d^m \mid m, n > 0\}$ 

22)  $L = \{a^nb^m \mid n > m > 0\}$ 

23)  $L = \{wcw^r \mid w \in \{a, b\}^*\}$ 

24)  $L = \{a^n \mid n > 0\}$ 

25)  $L = \{a^nb^m \mid m, n > 0\}$ 

26)  $L = \{a^{2n} \mid n > 0\}$ 

27)  $L = \{(ab)^n \mid n > 0\}$ 

28)  $L = \{0^i \ 1^j \ 0^k \mid j > i + k\}$ 

29)  $L = \{a^i b^j | i \le 2i\}$ 

30)  $L = \{w \mid n_a(w) = n_b(w) + 1\}$ 

31) Strings of even length such that the two symbols in the middle are same