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17/sci01/067

CSC 304

Assignment

1) a) Language whose length is at most 3

$$\Rightarrow L = \{\epsilon, a, b, aaa, bbb, bab, baa\}$$
$$\epsilon + a + b + aaa, aba, baa, bbb$$
$$(a + b)^3 (a + b)^2$$

b) Language of even length

$$\Rightarrow (a + b)^2 (a + b)^*$$

$$L = \{\epsilon, aa, ab, ba, bb, aaaa, \dots\}$$

c) Language starting and ending with different letters

$$\Rightarrow a(a + b)^*b + b(a + b)^*a$$