1. **The language of all strings containing exactly two 0’s 𝞢={0,1}**

L={00, 100, 010,100,1100 ,0101,10101, 1111001, 0011, 00111111,….}

RE= 1\*.0.1\*.0.1\*

1. **The language of all strings containing 0’s multiple of 2 over 𝞢={0,1}**

RE= (1\*.0.1\*.0.1\*)\*

1. **RE for the language of all strings that do not end in 01**

L={00, 11, 10, **0**00, **1**00, **01**00, **101010**10, **01000000000**11,……..}

L RE= (0+1)\*11+(0+1)\*10+(0+1)\*00

RE= (0+1)\*.(11+00+10)

𝞢= {a,b}

1. **RE for Set of all strings neither ending in b nor in ba**

L= {Ɛ, a, aa, aaa, babaa, ababaa, bbbbbbbbaa, …….}

L={Ɛ, a, aa, abaa, baa, abababaa, **bababab**aa, aaa, …….}

RE=(a+b)\*.aa + a+ Ɛ

1. **RE for Set of all strings neither ending in ab nor in ba**

**L={** Ɛ, aa, bb, aaa**bb**, ababab**aa**, **bababa**bb, a, b, …..}

RE=(a+b)\*.(aa+bb) + a + b+ Ɛ

1. **RE for the language of all strings containing at least two 0’s**

L={100, 1010, 10101, 1110000001, 110111000001, 100000001,1000000, 111111100, ……}

RE=1\*.0.1\*.0.(0+1)\*= (1+0)\*.0.1\*.0.1\*= 1\*.0.(0+1)\*.0.1\*=(0+1)\*.0.(0+1)\*.0.(0+1)\*

1. **RE for Set of all strings ending in b over** 𝞢= {a, b}

L={b, ab, bb, aaab, aabb, abbb, bbbb, **abababa**b,….}

RE=(a+b)\*.b

1. **RE for Set of all strings ending in ba over** 𝞢= {a, b}

L={ba, aba, bba, ababa, aaaaaaaba, bbbbbba, abababababbbbbba, ……}

RE=(a+b)\*.ba

a\*.b\*=(epsilon,a, b, aaaa,bbbbb, abbbbb,….}