N1

a)

j	0	1	2	3	4	5	6
P[0..j]	a	a	b	a	a	b	b
f[j]	0	1	0	1	2	3	0

j=0: f[j]=0

j=1: P[1]=P[0] => f(1)=0+1=1

j=2: P[2]≠P[1] => Let j-1-1=0, f(0)=0 => set i=0

P(2)≠P(0) => f(2)=0

j=3: P[3]=P[i=0] => f(3)=i+1=1, i+=1

j=4: P[4]=P[i=1] => f(4)=i+1=2; i+=1

j=5: P[5]=P[i=2] => f(5)=i+1=3; i+=1

j=6: P[6]≠P[3] => take P[i-1] and look at the f[i-1]=0 => P[0] - is the element we should compare with now

P[6]≠P[0]

As there are no more values to the left from P[0] => f[6]=0

b) b a a a b b a a b a a b a a b b

a(1)

a(1) a(3) b(4)

a(5) a(6)

a(7)

a(8)

a(9) a(10) b(11) a(12) a(13) b(14) b(15)

a(16) a(17) b(18) b(19)

prefix suffix

a a b a a b – Stop

prefix = suffix => the last iteration starts from the 1st value of suffix, because ~~it is known~~ prefix is compared already before the stop.

Total number of comparisons: 19