		cost	time
Insertion-Sort(A)	1		
for j = 2 to A.length	2	c_1	n
i = j − 1	3	c_2	$n-1$
Key = A[j]	4	c_3	$n-1$
Best / worst: * while i > 0 && A[i] > Key	5	c_4	$\sum_{j=2}^{n} t_j$
A[i+1] = A[i]	6	c_5	$\sum_{j=2}^{n} (t_j - 1)$
i = i − 1	7	c_6	$\sum_{j=2}^{n} (t_j - 1)$
A[i+1] = Key.	8	c_7	$n-1$

$$T(n) = c_1 n + c_2(n-1) + c_3(n-1) + c_4 \left(\sum_{j=2}^{n} t_j\right) + c_5 \left(\sum_{j=2}^{n} (t_j - 1)\right) + c_6 \left(\sum_{j=2}^{n} (t_j - 1)\right) + c_7 (n-1)$$

Best case – when every thing is sorted. So line 8 is executed only $(n-1)$ times

So we can write.

$$= c_1 n + c_2(n-1) + c_3(n-1) + c_4(n-1) + c_7(n-1).$$

$$= (c_1 + c_2 + c_3 + c_4)n - (c_2 + c_3 + c_4 + c_7)$$