A[1]	A[2]	A[3]	A[4]	A[5]	A[6]	A[7]	A[8]	A[9]	A[10]
5	3	7	4	9	2	11	8	13	10
opt[1]=1	opt[2]=1	opt[3]=2	opt[4]=2	opt[5]=3	opt[6]=1	opt[7]=4	opt[8]=3	opt[9]=5	opt[10]=4
-	-	**π[3]**=2 (or 1)	**π[4]**=2	**π[5]**=3	-	**π[7]**=5	**π[8]**=3 (or 4)	**π[9]**=7	**π[10]**=5 (or 8)

Longest increasing sequence containing the last element for:
A[1] is just 5;
A[1..2] is just 3, because 3 cannot extend 5 (3<5);
A[1..3] is either (3,7) or (5,7) because 7>3 and 7>5;
A[1..4] is (3,4) because 4 can extend only sequence for 3
A[1..5] is (3,7,9) because 9>7 so 9 can extend (3,7);
A[1..6] is just 2 because 2 cannot extend any of the previous sequences;
A[1..7] is (3,7,9,11) because 11 can extend (3,7,9);
A[1..8] is (2,7,8) because 8 can only extend (2,7);
A[1..9] is (3,7,9,11,13) because 13 can extend all previous maximal increasing sequences, but the longest is (3,7,9,11)
A[1..10] is (3,7,9,10) or (3,7,8,10)

Optimal solution is opt(9)=5 for achieved for i=9.

So the sequenc

A[2]				
3	7	9	11	