

Longest Palindrome										s = "babad" s.length = 5		i=0		i=1		i=2		i=3		i=4		i=5																							
steps												variable	value	variable	value			variable	value			variable	value	variable	value	variable	value																		
1										var longestPalindrome = function (s) {																																			
3										let max = -Infinity, count		max	Infinity	max	1			max	3																										
4										let prev, next, start, end																																			
5	21	40	55	69	80					for (let i = 0; i < s.length; i++) {		i	0	i	1			i	2			i	3	i	4	i	5																		
6	22	41	56	70						prev = i - 1		prev	-1	prev	0			prev	1			prev	2	prev	4																				
7	23	42	57	71						next = i + 1		next	1	next	2			next	3			next	4	next	5																				
8	24	43	58	72						count = 1		count	1			count = 1																													
9	25	44	59	73						while (prev >= 0 && next < s.length) {		(1 >= 0 && 1 < 5)		(0 >= 0 && 2 < 5)		(1 >= 0 && 3 < 5)		(1 >= 0 && 3 < 5)		(0 >= 0 && 4 < 5)		(2 >= 0 && 4 < 5)		(3 >= 0 && 5 < 5)																					
26	46	60								if (s[prev] === s[next]) {				'b' === 'b'				'a' === 'a'		'b' === 'd'		'b' === 'd'																							
27										prev--				prev	-1			prev	0																										
28										next++				next	3			next	4																										
29										count += 2				count	3			count	3																										
										} else {																																			
										break																																			
										}																																			
10	30	47	61	74						if (count > max) {		(1 > -Infinity)		(3 > 1)				(3 > 3)		(1 > 3)		(1 > 3)																							
11	31									max = count		max	1	max	3																														
12	32									start = prev + 1		start	-1 + 1 = 0	start	0																														
13	33									end = next - 1		end	1 - 1 = 0	end	2																														
										}																																			
										//for even combinations																																			
14	34	48	62	75						prev = i		prev	0	prev	1			prev	0	prev	2	prev	3	prev	4																				
15	35	49	63	76						next = i + 1		next	1	next	2			next	1	next	3	next	4	next	5																				
16	36	50	64	77						count = 0		count	0			count = 0																													
17	33	51	65	78						while (prev >= 0 && next < s.length) {		(0 >= 0 && 1 < 5)		(1 >= 0 && 2 < 5)				(0 >= 0 && 1 < 5)		(2 >= 0 && 3 < 5)		(3 >= 0 && 4 < 5)		(4 >= 0 && 5 < 5)																					
18	37	52	66							if (s[prev] === s[next]) {		'b' === 'a'		'a' === 'b'				'b' === 'a'		'b' === 'a'		'a' === 'd'		'a' === 'd'																					
										prev--																																			
										next++																																			
										count += 2																																			
										} else {																																			
19	38	53	67							break																																			
										}																																			
20	39	54	68	79						if (count > max) {		(0 > 1)		(0 > 3)				(0 > 1)		(0 > 3)		(0 > 3)		(0 > 3)																					
										max = count																																			
										start = prev + 1																																			
										end = next - 1																																			
										}																																			
81										let result = ''																																			
82	84	86	88							for (let i = start; i <= end; i++) {																																			
83	85	87								result += s[i]																																			
										}																																			
89										return "1: " + result																																			
										};																																			
2										90 console.log(longestPalindrome("babad"))																																			
																							start		0		end		2		result		''		i = 0		i = 1		i = 2						
																							result		'b'		result		'ba'		result		'bab'												