

Am. To. The. Q. No. 07

Dataset  $\rightarrow [-18, 7, -9, 11, 13, -17, -15, 2, 10, 9, 7, -3,$   
 $-15, 9, 18, -1, -3, 8, 5, 19, 8, -2, -17, 11, -12]$

Index	0	1	2	3	4	5	6	7	8	9	10	11	12
Data	0	-18	7	-9	11	13	-17	-15	2	10	9	7	-3
Sum	0	-18	7	-2	11	24	7	-8	2	12	21	28	25
Prev	0	0	0	2	0	4	5	6	0	8	9	10	11

Index	13	14	15	16	17	18	19	20	21	22	23	24	25
Data	-15	9	18	-1	-3	8	5	19	8	-2	-17	11	-12
Sum	10	19	37	36	33	41	46	65	73	71	54	65	53
Prev	12	13	14	15	16	17	18	19	20	21	22	23	24

(a) Sum Array  $\rightarrow [0, -18, 7, -2, 11, 24, 7, -8, 2, 12, 21, 28, 25,$   
 $10, 19, 37, 36, 33, 41, 46, 65, 73, 71, 54, 65, 53]$

(b) Previous Index Array  $\rightarrow [0, 0, 0, 2, 0, 4, 5, 6, 0, 8, 9, 10, 11, 12, 13, 14, 15,$   
 $16, 17, 18, 19, 20, 21, 22, 23, 24]$

(c) Starting Index  $\rightarrow 8$

(d) Ending Index  $\rightarrow 21$

(e) Maximum Sum  $\rightarrow$  Array  $\rightarrow [2, 10, 9, 7, -3, -15, 9, 18, -1, -3, 8, 5,$   
 $19, 8]$

$\therefore$  Maximum Sum = 73

(Answer)