

Bottom-up Solution: Bottom up Cut-Rod

i \ j	1	2	3	4	5	6	7	8	9	10
1	1	5	8	9	10	11	17	17	20	24
2										
3										
4										
5										
6										
7										
8										
9										
10										

Bottom-up - cut rod (P, n)

Let r be new array.

$r[0] = 0$

for $j = 1$ to n

$q = -\infty$

for $i = 1$ to j

$q = \max(q, P[i] + r[j-i])$

$r[j] = q$

return $r[n]$

initial array is

0	0	0	0	0	0	0	0	0	0
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0	1	0	0	0	0	0	0	0	0
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0	1	$-\infty$	0	0	0	0	0	0	0
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0	1	5	0	0	0	0	0	0	0
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0	1	5	$-\infty$	0	0	0	0	0	0
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0	1	5	8	0	0	0	0	0	0
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0	1	5	8	$-\infty$	0	0	0	0	0
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0	1	5	8	10	0	0	0	0	0
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0	1	5	8	10	13	0	0	0
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0	1	5	8	10	13	0	0	0
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0	1	5	8	10	13	$-\infty$	0	0
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0	1	5	8	10	13	17	0	0
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0	1	5	8	10	13	17	$-\infty$	0
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0	1	5	8	10	13	17	18	0
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0	1	5	8	10	13	17	18	$-\infty$
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0	1	5	8	10	13	17	18	22
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