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February 17, 2022

MATH 3430 Assignment 6

(Problem 1) (10 points)

```
1 N=4
2 n=1
3 S=0
4 while n < N:
5     S = S + (2*n-1)
6     n = n+1
7 print (S)
```

Line	N	n	S	Next line to execute & reason
1	4	undef	undef	2, no branching
2	4	1	undef	3, no branching
3	4	1	0	4, no branching
4	4	1	0	5, since $1 < 4$ is True do code block
5	4	1	1	6, no branching
6	4	2	1	4, last line in code block
4	4	2	1	5, since $2 < 4$ is True do code block
5	4	2	4	6, no branching
6	4	3	4	4, last line in code block
4	4	3	4	5, since $3 < 4$ is True do code block
5	4	3	9	6, no branching
6	4	4	9	4, last line in code block
4	4	4	9	7, since $4 < 4$ is False do not do code block; skip block
7	4	4	9	None. Last line of the program.