**Observations as per the given problem statement**

**If input given is N, then there are 2^N possibilities of attending the class/not. Since absence more than 4 consecutive days is not allowed we have to find the solution for attending the classes with <4 absences. The values from 0 to N can be represented in binary.**

**For consecutive 4 zeroes we are rejecting the values. Now to come at the probability the absence on last day has to be counted i.e., if the last bit is unset then it is an absence.**

**Below table represent the observations**

|  |  |
| --- | --- |
| 0 | 00000 |
| 1 | 00001 |
| 2 | 00010 |
| 3 | 00011 |
| 4 | 00100 |
| 5 | 00101 |
| 6 | 00110 |
| 7 | 00111 |
| 8 | 01000 |
| 9 | 01001 |
| 10 | 01010 |
| 11 | 01011 |
| 12 | 01100 |
| 13 | 01101 |
| 14 | 01110 |
| 15 | 01111 |
| 16 | 10000 |
| 17 | 10001 |
| 18 | 10010 |
| 19 | 10011 |
| 20 | 10100 |
| 21 | 10101 |
| 22 | 10110 |
| 23 | 10111 |
| 24 | 11000 |
| 25 | 11001 |
| 26 | 11010 |
| 27 | 11011 |
| 28 | 11100 |
| 29 | 11101 |
| 30 | 11110 |
| 31 | 11111 |

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