AI1103 : Assignment 2

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Download all python codes from

https://github.com/Santosh−Dhaladhuli2003/AI1103/blob/main/Assignment%202/assignment_2.py

and latex codes from

https://github.com/Santosh−Dhaladhuli2003/AI1103/blob/main/Assignment%202/Assignment%202.tex

1 GATE EE 2013 Question No. 61

1. What is the chance that a leap year,selected at random,will contain 53 Saturdays?
   A. $\frac{2}{7}$ *B*. $\frac{3}{7}$ *C*. $\frac{1}{7}$ *D*. $\frac{5}{7}$

2 Solution

There are 52 complete weeks in an year
$\implies 52 \times 7 = 364$
So, the 364 days will definitely have 52 Saturdays.
remaining days = 366 - 364
The 53^{rd} Saturday can occur at the remaining 2 days.
$\therefore$ The Probability of 53 Saturdays in a leap year = $\frac{2}{7}$
The correct answer is **Option A**