AI1103 : Assignment 2

Santosh Dhaladhuli MS20BTECH11007

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

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 53rd Saturday can occur at the remaining 2 days.

$\therefore$ Probability of 53 Saturdays in a leap year = $\frac{2}{7}$

The correct answer is **Option A**