Exemplar Problem with Solution :

Q) In a non-leap year the probability of getting 53 Sundays or 53 Tuesdays or 53 Thursdays is.

Soln :

Non-leap year has 365 days

1 year =52 weeks

=52×7days

=364 days [It contains 52 Sundays, Mondays and so on].

∴1 day will be left sample space for this

 1 day ={Mon, Tue, Wed, Thurs, Fri, Sat, Sun}

P[53 Sundays]=1/7

P[53 Tuesdays]=1/7

P[53 Thursdays]=1/7

P(53 Sundays or 53 Tuesdays or 53 Thursdays)

= P(53 Sundays)+P(53 Tuesdays)+P(53 Thursdays)

= 1/7+1/7+1/7

= 3/7