Lab Assignment -1

1. Consider a set of integers from 1 to 100. Write a R/Python code to find the probability that the selected number is
   (a) Even
   (b) Odd
   (c) Prime
   (d) Divisible by 4 and 6.

2. Suppose a fair dice is rolled 10 times. Using R/Python find the probability that
   (a) sum of the number is less than 22
   (b) sum of the number is greater than 25.

3. Suppose a family has sixteen children. Assume that is child is equally likely to be either a boy or a girl. Write a R/Python code to find the probability that
   (a) Exactly six of the children are boys.
   (b) Exactly eight of the children are girls.
   (c) There are 6 or 7 boys
   (d) The number of boys lies between the interval [7,12].

4. A box contains 10 white balls, 20 red balls, and 30 green balls. If 7 balls are drawn with replacement, write a R/Python code to find the probability that
   (a) 4 white and 3 red balls appears
   (b) All 7 are the same colour.