Trigonometric functions. Write a program that finds the value of sine and cosine of an angle using the Taylor series expansion. Formula to use is given below. This program will take two input values:

x: is the angle for which you want to find sine and cosine
n: is the number of terms in the Taylor series expansion. (More the number of terms in the Taylor series expansion, more accurate the value of the

$$\cos x = 1 - \frac{x^2}{2!} + \frac{x^4}{4!} - \frac{x^6}{6!} + \frac{x^8}{8!} - \dots$$

$$\sin x = x - \frac{x^3}{3!} + \frac{x^5}{5!} - \frac{x^7}{7!} + \frac{x^9}{9!} - \dots$$