CS112: Python Programming  
Assignment 02

Write a program including a function to find and print the area of trapezium using the formula area = (1/2) \* (a + b) \* h. Here, a and b are the two bases of trapezium and h is the height; all are obtained from keyboard input.

Generate a matrix **A** with random Gaussian entries of dimensions 20 × 50, and do the following matrix operations:

**A** + **A**

**AA**T

**A**T**A**

Numerically solve the following system of equations using two approaches: scipy.linalg.solve function and 



Numerically integrate the following integrals :

