

Session 1 Homework

1. Write a program that multiplies two matrices using an algorithm of your choice. Matrices are represented by 2-dimensional arrays. The numbers in the arrays are all integers with an absolute value of 100. State the complexity of the program.
2. Prove that the number of bits needed to represent an integer in binary is given by

$$b = \lfloor \log_2 n \rfloor + 1$$