1. Merkle-Hellman knapsack system

Used SymPy python library for finding modulo inverse and greatest prime after n.

m=2036764117802210446778721319780021357

w=127552671440279916013021

**Result:**

Enter y filename:y.txt

Enter knapsack filename:knapsack.txt

MiraMesa is acommunity and neighborhood in the city of San Diego, California. The city-recognized MiraMesa Community Plan Area isroughly bounded by Interstate 15 on the east, Interstate 805 on the west, the Los Penasvuitos Canyon on the north and Marine Corps Air Station Miramar onthe south.[2] Most of thecommunity plan area is referred to as Mira Mesa; the community plan area also includes the neighborhoods of Sorrento Valley and SorrentoMesa.

**Final Result:**

MiraMesa is a community and neighborhood in the city of San Diego, California. The city-recognized MiraMesa Community Plan Area is roughly bounded by Interstate 15 on the east, Interstate 805 on the west, the Los Penasvuitos Canyon on the north and Marine Corps Air Station Miramar on the south. [2] Most of the community plan area is referred to as Mira Mesa; the community plan area also includes the neighborhoods of Sorrento Valley and SorrentoMesa.

1. **PGM:**

**Result:**

Enter the PGM log filename:logs.txt

Enter the cipher filename:cipher.txt

enter seed :2000

In Contra, the player controls one of two armed military commandos named Bill "Mad Dog" Rizer and Lance "Scorpion" Bean, who are sent on a mission to neutralize a terrorist group called the Red Falcon Organization that is planning to take over the Earth. Details of the game's setting varies between supplementary materials: the Japanese versions sets the game in the year 2633 on the fictional "Galuga archipelago" near New Zealand,[6][7] whereas the manual for the American NES version sets the game during the present in an unnamed South American island. The American storyline also changes the identity of "Red Falcon" from being the name of a terrorist organization to the name of an alien entity.[8]The main character is equipped with a rifle with an unlimited amount of ammunition. The player can also jump, move and fire in eight directions, as well as move or jump simultaneously while firing. A single hit from any enemy, bullet, or other hazard will instantly kill the player character and discard the current weapon.There are over 10 areas in the game.[6] There are two types of stages in Contra. In addition to the standard side view stages, Contra also features stages in which the player character is seen from behind and must move towards the background in order to proceed. Each of these "3D maze" stages are set inside the corridor of an enemy base in which the player must fight through the base's defenses in order to reach the core of the base. During the 3D maze stages, the upper screen will display a map of the base along with a time limit. Each maze stage is followed by a "3D fixed" stage set at the core of the base, in which the player must destroy a series of flashing sensors to expose an even larger sensor and destroy it.Contra also features a two-player cooperative mode. Both players occupy the same screen and must coordinate their actions. One player lagging behind can cause problems for his partner, as the screen will not scroll onward, and a slow player can be fatal to his partner. The European release, Gryzor, does not feature a simultaneous 2-Players mode. Instead, both players take turns: whenever one player dies, the other gets his turn.