# A logo with a circle and a circle with a chain and a circle with a circle and a circle with a circle with a circle and a circle with a circle with a circle with a circle with Description automatically generated7th Assignment spl report About :cantor pairing functions using Go lang

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Cantor Pairing Function Program

A computer screen with text on it

Description automatically generatedimporting libraries we will use like errors for handling errors and fmt for input and output

and strconv for parsing

and time for time delay in loading animation

cantor\_pair is function to encode two numbers in one number and it takes two arguments and should take two positive numbers then if condition to check positive or negative number if negative will give error

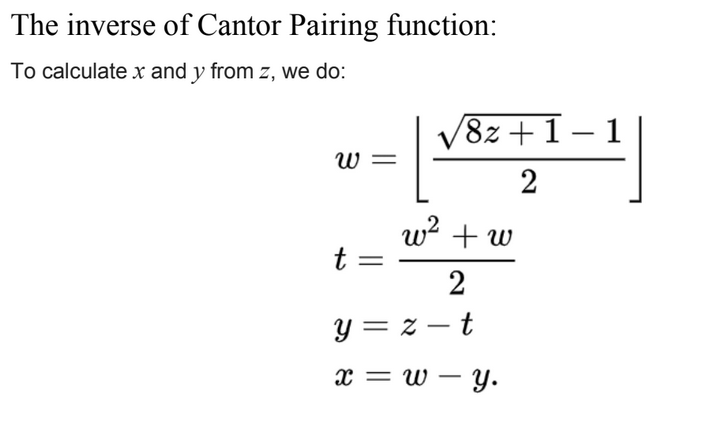
A math equation with numbers and symbols

Description automatically generatedthen do encoding operation like equation in the figure below

The inverse of Cantor Pairing function

A computer screen with text on it

Description automatically generated

The inverse cantor pairing functions take one argument z which is encoded number so we will check if z is positive or not if not will print 0 and 0 and gives you error input must be a positive integer Then calculate w and t and y and x then like the fig below

A screen shot of a computer program

Description automatically generatedinput function to obligate the user to put positive numbers

and loading function is for animation to display characters in delay time which make program more cool

A computer screen shot of a program code

Description automatically generated

main function has a selecting menu to select functions like 1cantor pairing and 2inverse cantor and 3 exit

# A screenshot of a computer Description automatically generatedRunning program

A math equation with numbers and symbols

Description automatically generated with medium confidenceThe output is correct in cantor pairing and inverse pairingLike these figures

A math problem with numbers and equations

Description automatically generated

Thank

You

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