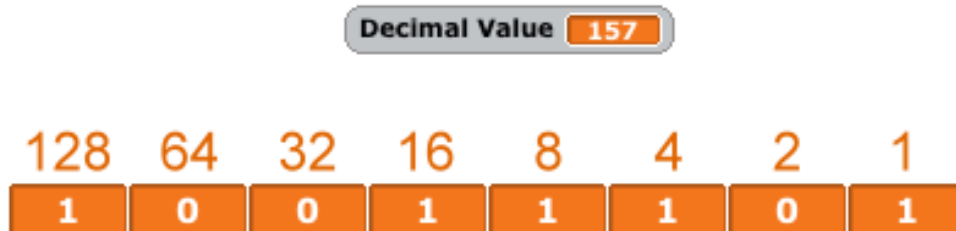# DecimalToBinary.sb

Project Author: Franz Ayestaran

Project Author: Franz Ayestaran

Created: 27th March 2016

Updated: 28th March 2016

Description:
This project allows the user to convert a decimal value to a binary value.

Instructions:
Simply click the green start flag and enter the desired decimal value into the pop up to display the binary equivalent..

Project Link: https://github.com/Code-Munkeys/Sense/raw/master/DecimalToBinary.sb

CaesarCipher.sb

Input

GENIUS WITHOUT
EDUCATION IS LIKE
SILVER IN THE MINE.

Output

TRAVHF JVGUBHG
RQHPNGVBA VF YVXR
FVYIRE VA GUR ZVAR.

InputLetters

1 G
2 E
3 N
4 T

+ length: 52

OutputLetters

1 T
2 R
3 A
4 V

+ length: 52

Ascii

1 A
2 B
3 C
4 D

+ length: 52

Key 13

Project Author: Franz Ayestaran

Project Author: Franz Ayestaran

Created: 25th March 2016

Updated: 26th March 2016

Description:

This project allows the user to encrypt text with a simple offset algorithm - also known as Caesar cipher. If you are using 13 as the key, the result is similar to an rot13 encryption.

Instructions:

Simply click the green start flag to run the program, use the key slider to set the offset algorithm and press either [E] to encode or [D] to decode the entered text via a pop up when prompted. If nothing is entered then an example text will be submitted, use the turbo function to speed up the process.

Project Link: https://github.com/Code-Munkeys/Sense/raw/master/CaesarCipher.sb

MorseCodeGenerator.sb

Letter   C   Code   -.-.   MessageLength   20

A •■
B ■•••
C ■•■•
D ■••
E •
F ••■•
G ■■•
H ••••
I ••
J •■■■
K ■•■
L •■••

M ■■
N ■•
O ■■■
P •■■•
Q ■■•■
R •■•
S •••
T ■
U ••■
V •••■
W •■■
X ■••■

Y ■•■■
Z ■■••
1 •■■■■
2 ••■■■
3 •••■■
4 ••••■
5 •••••
6 ■••••
7 ■■•••
8 ■■■••
9 ■■■■•
0 ■■■■■

Project Author: Franz Ayestaran

Message   Morse Code Generator

Project Author: Franz Ayestaran

Created: 25th November 2015

Updated: 29th November 2015

Description:

Morse code tone generator, simply type in your message and listen as it gets transformed into a sequence of dots and dashes.
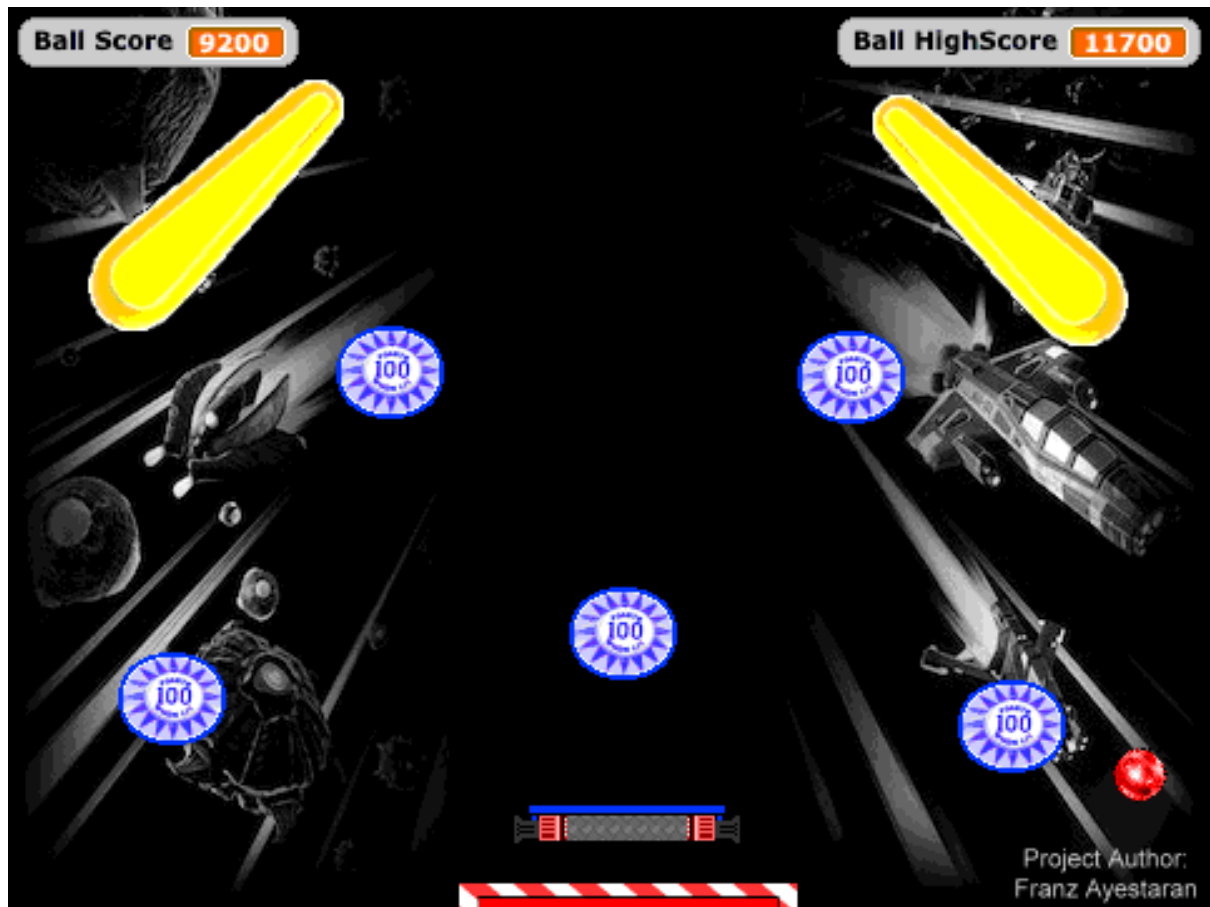
Instructions:

Simply click the green start flag to run the program and enter your message into the pop up.

Project Link: https://github.com/Code-Munkeys/Sense/raw/master/MorseCodeGenerator.sb

YouTube Video: https://youtu.be/YjRI5SP94IA

Pinball.sb

Created: 14th November 2015

Updated: 29th November 2015

Description:

An interactive pinball game that starts a ball rolling, enabling the player to collect points on the way. The blue and yellow bumpers light up whenever the ball is close, rebounding it back in the opposite direction at a randomised angle. The player can deflect the ball with the aid of a power paddle positioned just above the red zone. The game ends when the ball lands on the red zone at the bottom of the stage. The project includes sampled sounds from a real Pinball machine.
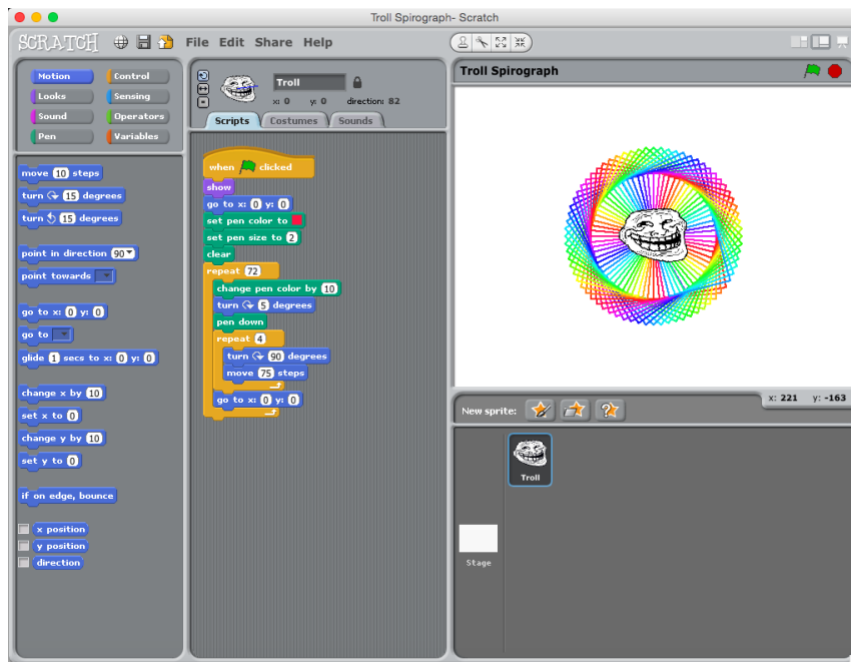
Instructions:

Simply click the green start flag to run the program. Use the arrow keys to move the power paddle left and right.

Project Link: https://github.com/Code-Munkeys/Sense/raw/master/Pinball.sb

YouTube Video: https://youtu.be/hSudCYIPBng

TrollSpirograph.sb

Author: Franz Ayestaran

Created: 10th October 2015

Updated: 25th October 2015

Description:

Generate a multi-colour spirograph. Added a Troll face, a very popular character found in many YouTube videos.

Instructions:

Simply click the green start flag to run the program.

MIT Project Link: https://scratch.mit.edu/projects/84727252/

YouTube Video: https://youtu.be/PKQrPbfzG_Y