//-----------------------------------------------------------------------------

// Project: Linear Genome Assembly Language (LGAL) Example

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//-----------------------------------------------------------------------------

// Initialise assembler parameters.

#CodonWidth = 3

#BaseAlignment = 3

#CodonAlignment = 3

#PromoterAlignment = 3

#RibosomeBindingSiteAlignment = 3

#CodingRegionAlignment = 3

#NonCodingRegionAlignment = 3

#TerminatorAlignment = 3

#SequenceAlignment = 3

// mDNA Bases

Base T = 0;

Base C = 1;

Base A = 2;

Base G = 3;

//-----------------------------------------------------------------------------

// Main sequence

//-----------------------------------------------------------------------------

Sequence Main

{

#Repeat 10

Telomere;

#End

SyntheticOxytocin;

#Repeat 10

Telomere;

#End

}

//-----------------------------------------------------------------------------

// Start Codon

//-----------------------------------------------------------------------------

Sequence Start

{

Codon ( ATG );

}

//-----------------------------------------------------------------------------

// Terminator Codons

//-----------------------------------------------------------------------------

Terminator StopTAA { Codon ( TAA ); }

Terminator StopTGG { Codon ( TGG ); }

Terminator StopTGA { Codon ( TGA ); }

Terminator Stop { StopTAA; }

//-----------------------------------------------------------------------------

// Synthetic Oxytocin

//-----------------------------------------------------------------------------

CodingRegion SyntheticOxytocin

{

Start;

Codon ( TGT, TAT, ATT, CAA, AAT, TGT, CCT, CTT, GGT );

Stop;

}

//-----------------------------------------------------------------------------

// Vertebrate Telomere

//-----------------------------------------------------------------------------

Sequence Telomere

{

Base ( TTAGGG );

}

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Address: 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 Encoding

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0000000: TTA GGG TTA GGG TTA GGG TTA GGG TTA GGG-TTA GGG TTA GGG TTA GGG TTA GGG TTA GGG ····················

0000020: ATG TGT TAT ATT CAA AAT TGT CCT CTT GGT-TTA TAA GGG TTA GGG TTA GGG TTA GGG TTA MCTIQNCPLG♦·········

0000040: GGG TTA GGG TTA GGG TTA GGG TTA GGG TTA-GGG ... ... ... ... ... ... ... ... ... ···········

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