# -\*- coding: utf-8 -\*-

"""

Created on Sat Sep 6 16:00:42 2025

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# test\_install\_all.py

# This script tests all functions in signal\_ict\_kings package

# Run this to verify installation from TestPyPI

import numpy as np

import signal\_ict\_Seshu\_Vardhan\_Reddy\_92400133167 as sik # Fixed import statement

print("===== Testing signal\_ict\_Seshu\_Vardhan\_Reddy package =====")

n = np.arange(10)

t = np.linspace(0, 1, 100)

# 1. Unit Step

print("Unit Step:", sik.unit\_step(n))

# 2. Unit Impulse

print("Unit Impulse:", sik.unit\_impulse(n))

# 3. Ramp Signal

print("Ramp Signal:", sik.ramp\_signal(n))

# 4. Sine Wave

sine = sik.sine\_wave(1, 5, 0, t)

print("Sine Wave (first 10 values):", sine[:10])

# 5. Cosine Wave

cosine = sik.cosine\_wave(1, 5, 0, t)

print("Cosine Wave (first 10 values):", cosine[:10])

# 6. Exponential Signal

exp\_signal = sik.exponential\_signal(n, a=0.2)

print("Exponential Signal:", exp\_signal)

# 7. Time Shift

sine\_shifted = sik.time\_shift(sine, 5)

print("Time Shifted Sine (first 10 values):", sine\_shifted[:10])

# 8. Time Scale

sine\_scaled = sik.time\_scale(sine, 2)

print("Time Scaled Sine (first 10 values):", sine\_scaled[:10])

# 9. Signal Addition

added = sik.signal\_addition(sik.unit\_step(n), sik.ramp\_signal(n))

print("Signal Addition (Step + Ramp):", added)

# 10. Signal Multiplication

multiplied = sik.signal\_multiplication(sine, cosine)

print("Signal Multiplication (first 10 values):", multiplied[:10])