

QIS101 All Required Work (Tasks and Files to Comment)

Session 01 - Introducing Quantum Computing	
01-01	infinite_sequence.pdf
Session 02 - Installing Courseware	
02-01	my_quip.py
Session 03 - Introducing Python	
Comment	perfect_numbers.py
03-01	celsius_to_fahrenheit.py
03-02	sum_squares.py
03-03	sum_multiples.py
Session 04 - Computational Mathematics	
Comment	goldbach_conjecture.ipynb
04-01	lcm_from_gcd.py
04-02	custom_cf.py
04-03	factor_quadratic.py
Session 05 - Algorithmic Efficiency	
Comment	dealer_fast.py
05-01	closest_point.py
05-02	connect_four.py
Session 06 - Data Visualization	
Comment	random_walk.py
06-01	plot_ellipse.py
06-02	random_walk_gamma.py
06-03	Essay: sin_acos.pdf & plot_sin_acos.py
06-04	plot_limits.py
Session 07 - Information Theory	
Comment	freq_histogram.py
07-01	ciphertext2.txt -> plaintext2.txt
07-02	octal_converter.ipynb
07-03	board_encoding.py
07-04	hamming_set.ipynb
Session 08 - Early Quantum Mechanics	
08-01	hydrogen_spectrum.py
08-02	doppler_redshift.py
Session 09 - Probability and Statistics	
Comment	bessel_correction.py
09-01	benfords_law.py
09-02	maxwell_boltzmann.py
Session 10 - Numerical Analysis	
Comment	roots_sympy.py
10-01	archimedes_spiral.py
10-02	eulers_constant.py
10-03	lead_attenuation.py
10-04	catalans_constant.py
Session 11 - Scientific Computing and Data Science	
Comment	iris_analysis.ipynb
11-01	octane_combustion.ipynb
11-02	punnet_square.py
11-03	earthquakes.ipynb

Session 12 - Complex Algebra	
Comment	riemann_hypothesis.py
12-01	complex_lattice.py
12-02	complex_factorial.py
Session 13 - Classical Wave Equations	
Comment	travelling_waves.py
13-01	agnesi_witch.py
13-02	werner_formula.py
Session 14 - Fourier Analysis	
Comment	make_samples.py
14-01	plot_unknown_wave.py
14-02	Essay: gibbs_phenomenon.pdf
14-03	Essay: uncertainty_principle.py
Session 15 - Linear Algebra	
Comment	maze_search.py
15-01	solve_4x4.py
15-02	hermitian_matrices.ipynb
15-03	maze.csv.pickle
Session 16 - Vector Algebra	
Comment	plot3d_surface.py
16-01	plot3d_cylinder.py
16-02	plot3d_complex_sine.py
Session 17 - Mathematical Modeling and Machine Learning	
Comment	quadratic_regression.py
17-01	braking_distance.py (road1.csv, road2.csv)
17-02	euler_curve.py
Session 18 - Differential Equations	
Comment	estes_rocket.py
18-01	harmonograph.py
18-02	rlc_circuit.ipynb
Session 19 - Dynamical Systems	
Comment	mandelbrot_set.py
19-01	ifs_hexagonal.py
Session 20 - Monte Carlo Methods	
20-01	mc_exp_dist.ipynb
20-02	sphere_sampling.py
Session 21 - Digital Circuits	
21-01	Digital Design App (full_adder.dig)
21-02	majority_vote.ipynb
Session 22 - Quantum Mechanics	
22-01	particle_location.py
Session 23 - Quantum Circuits	
23-01	quantum_circuit1.ipynb
23-02	quantum_circuit2.ipynb
23-03	quantum_circuit3.ipynb
Session 24 - Quantum Algorithms	
24-01	
24-02	
24-03	