

CP5805 – Assessment 5: Advanced Data Analysis

IPO Charts

main()

Input	Processing	Output
	data_frame valid_menu_options menu_choice data	

display_main_menu()

Input	Processing	Output

get_menu_choice(valid_menu_options)

Input	Processing	Output
valid_menu_options		menu_choice

load_data ()

Input	Processing	Output
	file valid_file	data

validate_file_pointer(file)

Input	Processing	Output
file	valid_file	

display_variable_menu(data_frame)

Input	Processing	Output
data_frame	variable_name	number_of_variables data_frame_names

get_variable_choice(number_of_variables)

Input	Processing	Output
number_of_variables	integer_input	variable_choice

calculate_statistics(data_frame_names, variable_choice, data_frame)

Input	Processing	Output
data_frame_names variable_choice data_frame	chosen_variable number_of_values mean standard_deviation standard_error	statistics

display_statistical_report(data_frame)

Input	Processing	Output
data_frame	number_of_variables data_frame_names variable_choice statistics	

display_plotting_menu()

Input	Processing	Output

get_plotting_choice()

Input	Processing	Output
	valid_plotting_options	plotting_choice

generate_plot(data_frame)

Input	Processing	Output
data_frame	plotting_choice	