Variable Declarations		
Type	**Name**	**Function**
Array (real, allocatable)	grid	1D array to store grid values
	S_matrix	2D matrix to store 3-point scheme matrix
	potential_vector	1D array to store value of potential at every grid point
	potential_matrix	2D matrix made from potential array
	hamiltonian	2D matrix to store sum of S and V
	eigenvalues	1D array to store initial 'first guess' eigenvalues
	solutions_left and solutions_right	1D arrays to store left and right solution curve/solution values
	final	1D array to store final solution array per eigenvalue
	all_final	2D matrix to store final solution arrays of all eigenvalues
	final_eigenvalues	1D array to store all final eigenvalues
Number (real)	left_border and right_border	Left and right border of grid, provided by user
	h	Grid spacing
	lambda_i	Eigenvalue of solution i
	lambda_old	To store previous eigenvalue of past iteration
	d_lambda	Value of delta lambda (according to formula in project description)
	epsilon	Convergence criterion
	conversion_factor	To convert eigenvalues to energies in eV
	distance_nm	Conversion of provided left and right border values to nanometers
	derivative_left and derivative_right	Derivative of left and right solution at matching point m
	integral_left and integral_right	Integral over domain up until/from matching point for the left and right solution
	y1, y2, y_N and y_N_min_1	Boundary conditions
Number (integer)	N	Number of grid points
	m	Matching point
Number (parameter, real)	q_e	Electron charge (for conversion factor)
	hbar	Planck constant (for conversion factor)
	m_e	Electron mass (for conversion factor)