**Pseudo-code**

This is a Todo program. Users can create Todos as well as manage the already created Todos.

BEGIN

READ: Todos from external file

SET TodoList to read data from file

EXCEPTION

WHEN file not found exception

SET TodoList to new data structure

END

FUNCTION populateTodoList, takes a completed or incomplete choice as parameter

CASE choice passed as parameter

CONDITION completed:

FOR each Todo in TodoList

IF Todo is completed

Return Todo

END IF

END FOR

CONDITION incomplete:

FOR each Todo in TodoList

IF Todo is in-completed

Return Todo

END IF

END FOR

CONDITION default:

FOR each Todo in TodoList

Return Todo

END FOR

END FUNCTION

FUNCTION addTodo

GET title, dueDate,description,items from user

CALL todoExists method

IF todoExists return false

CALL isDateValid method to validate due date

IF isDateValid returns true

GET Todo Items

Create a Todo object

Add Todo object to TodoList

ELSE return date is invalid

END IF

ELSE return Todo exists

END IF

END FUNCTION

FUNCTION updateTodo

GET index of the Todo instance from TodoList

GET dueDate,description,items from user

CALL todoExists method

IF todoExists return false

CALL isDateValid method to validate due date

IF isDateValid returns true

GET Todo Items

Create a Todo object

Set Todo at index in TodoList

ELSE return date is invalid

END IF

ELSE return Todo exists

END IF

END FUNCTION

FUNCTION DeleteTodo

GET index of the Todo

Remove the Todo from TodoList where index

END FUNCTION

FUNCTION todoExists, takes a title

SET status to false

FOR each Todo in TodoList

IF Todo title equals given title

SET status to true

END IF

END FOR

Return status

END FUNCTION

FUNCTION isDateValid, takes a date string

SET regex string

Compile regex

Match the date string with regex

Return true if it matches, otherwise false

END FUNCTION