TO-DO LIST PROGRAM USING PYTHON

Introduction

The "to-do list" program is a simple and user-friendly application that allows users to manage their tasks by adding, editing, deleting and displaying them. The program is written in Python and utilizes several built-in functions to provide the functionality.

Program Structure

The program starts by creating an empty list called tasks, which will store all the tasks entered by the user. The program then enters a while loop that continues until the user chooses to exit the program. The user is prompted to enter a choice of action (add, edit, delete, display, or exit) using the input() function. The program uses an if-elif statement to check the user's choice and call the appropriate function.

Functionality

Add task

The add_task() function prompts the user to enter a task and appends it to the tasks list using the append() function. A message indicating that the task has been added is also printed.

Edit task

The edit_task() function allows the user to edit an existing task by first displaying the existing tasks and then prompting the user to enter the number of the task they want to edit. The user is also prompted to enter the new task. The task at the specified index in the tasks list is then updated with the new task using the assignment operator. A message indicating that the task has been updated is printed.

Delete task

The delete_task() function allows the user to delete an existing task by first displaying the existing tasks and then prompting the user to enter the number of the task they want to delete. The task at the specified index in the tasks list is then deleted using the del statement. A message indicating that the task has been deleted is printed.

Display task

The display_tasks() function first checks if the tasks list is empty using the len() function. If the list is empty, it prints a message indicating that there are no tasks to display. If the list is not empty, the function prints the task number and task for each task in the list using the enumerate() function.

Built-in functions:

The built-in functions used in the given program are:

len(tasks) is used to check if the list tasks is empty or not. enumerate(tasks) returns an enumerate object, which is an iterator that generates pairs of the form (index, item) for each item in the tasks list. input() prompts the user to enter a string and returns the string entered by the user. print(...) function is used to display prompts, task lists, and messages to the user throughout the program. append(task) function appends an element to the end of a list. del tasks[task_index] statement deletes the item at the specified index in the list tasks. tasks[task_index] = new_task statement updates the task in the list tasks by replacing the task at the specified index with the new task.

Conclusion

Overall, this program provides a simple and user-friendly interface for managing tasks and can be easily modified or extended to add additional features. The program structure is simple and easy to understand, making it a good starting point for beginners who want to learn about Python programming and list manipulation.