

# *Comprehensive Python course for AI*

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## *Exercises 5 && 6*

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*Deadline: 2023 19 October*

*Score: 700*

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*2023 10 October*

# *Comprehensive Python course for AI*

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## *Exercises 5*

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*Score: 200*

## *Question 01 (List)*

100

- ❖ **Create a Python program that first prompts the user to enter 10 numbers, which are then stored in a list. Subsequently, request the user to input a new number. If this new number is present in the list, remove all occurrences of it. If it's not found, insert the number twice at the beginning of the list. Finally, display the modified list to the user.**

## *Question 02 (List)*

100

- ❖ **Create a Python program that sorts elements from a list containing multiple data types—such as integers, floats, strings, and booleans—into lists of specific types. The program must iterate through the original mixed list, identifying the type of each element and adding it to the corresponding list assigned to that particular data type.**

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## *Exercises 6*

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*Score: 500*

# Question 01 (Project)

500

**Create a Python program that allows a user to manage tasks, track the time spent on them, and mark them as done or undone.**

- ✓ A task has a name, a status (True, False), and a duration (in hours).
- ✓ The data will be stored across three lists: one for task names, one for task statuses, and one for task durations.

## ❖ Add Task

- ✓ Add a new task to the list.
- ✓ Initially, the status is False, and the duration is set to None.
- ✓ that task names are unique.

## ❖ Display all products

- ✓ Display all data by details (task, status, duration)

## ❖ Remove Task

- ✓ Remove a task from the list based on its name.

# Question 01 (Project)

## ❖ Edit Task

- ✓ Edit the name of an existing task.

## ❖ Search Task

- ✓ Search for a task by name and display its details.

## ❖ Mark Task as Done

- ✓ Mark a task as done and record the time duration it took to complete.
- ✓ For time you have to get start and end time then calculate their difference

## ❖ Display Details

- ✓ Show details of all tasks, including the number of tasks, hours worked, and the number of completed tasks, as well as the number of uncompleted tasks.

## ❖ Help

- ✓ Display a help message showing information on how to use each command.

**Point: The program should repeat at most two hundred times unless the user writes exit.**

# Thanks

**Good Luck!**

Don't give up on your dreams 😊