

Task Report:

1. Task Description

- This task involves working with structured NumPy arrays to represent staff data with attributes such as `staffID`, `FullName`, `YearsOld`, and `Pay`.
- Key operations include:
 1. Printing the full staff data array.
 2. Extracting and displaying the names of all staff members.
 3. Displaying the pay of staff members who are older than 30.
 4. Updating the pay of a specific staff member and printing the updated array.

2. Task Output Screenshot

```
to re-enable it, run 'Import-Module PSReadLine'.

PS C:\Users\LUCKY\Desktop\brainly beam task> python -u "c:\Users\LUCKY\Desktop\brainly beam task\tempCodeRunnerFile.py"
• Staff Data Array:
[(101, 'lucky', 30, 55000.5 ) (102, 'dhvaril', 45, 62000. )
 (103, 'lubhna', 28, 48000.75)]

Names of Staff Members:
['lucky' 'dhvaril' 'lubhna']

Pay of Staff Members older than 30:
[62000.]

Updated Staff Data Array:
[(101, 'lucky', 30, 60000.5 ) (102, 'dhvaril', 45, 62000. )
 (103, 'lubhna', 28, 48000.75)]
```

3. Widget/Algorithm Used In Task

- **NumPy Structured Arrays:**
- The task leverages structured NumPy arrays to manage and manipulate tabular data efficiently.
- Conditional filtering is applied to extract rows where staff members meet certain conditions (e.g., age greater than 30).
- Array element modification is demonstrated by increasing the pay of the first staff member.