

Experiment No. 2.1

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Branch: MCA

Semester: I

Subject Name: Python Programming

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Section/Group: MAM-1/ Grp B

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1. Aim/Overview of the practical:

- A. Write an experiment to swap two columns in numpy array.
- B. Write an experiment import a dataset with numbers and texts keeping the text intact in python numpy?

2. Algorithm for experiment/practical:

A.)

- First, we import NumPy module
- Create a NumPy array
- Swap the column with Index
- Print the Final array

B.)

- To open the file, use the built-in open() function.
- The open() function returns a file object, which has a read() method for reading the content of the file.

3. Code for experiment/practical:

A.

```
import numpy as np

my_array = np.arange(12).reshape(4, 3)
print("Original array:") print(my_array)

my_array[:, [2, 0]] = my_array[:, [0, 2]]
print("After swapping arrays the last column and first column:")
print(my_array)
```

```
Original array:
[[ 0  1  2]
 [ 3  4  5]
 [ 6  7  8]
 [ 9 10 11]]
After swapping arrays the last column and first column:
[[ 2  1  0]
 [ 5  4  3]
 [ 8  7  6]
 [11 10  9]]

Process finished with exit code 0
```

B.

```
import numpy as np

File_data = np.loadtxt("clipboard.txt", dtype=int)
print(File_data)

C:\Users\krish\AppData\Local\Microsoft\Wi
[1 2 3 4 5 6 7]

Process finished with exit code 0
```

Learning outcomes (What I have learned):

1. Swapping of two columns in numpy.
2. Import a dataset with numbers and texts keeping the text intact in python numpy.