

## Assignment 4 (Deadline: Coming Tuesday's LAB)

Share through CR on your WhatsApp group (25-Nov-23) as:

AOA, share the following partial code for implementing 2D array in 1D array with your class. They are supposed to understand it and exercise similar code for 3D and 4D as assignment. They need to bring and get it evaluated in the coming LAB on Tuesday.

```
class twoDarray:
    pass

def create2Darray(S1, S2):
    tda = twoDarray()
    tda.data = [None]*(S1*S2)
    tda.d1size = S1
    tda.d2size = S2
    return tda

def get2DarrayElem(ar, i1, i2):
    # if i1 and i2 are in valid range
    return ar.data[i1*ar.d2size+i2]

def set2DarrayElem(ar, i1, i2, d):
    # if i1 and i2 are in valid range
    ar.data[i1*ar.d2size+i2] = d

def main():
    a = create2Darray(5, 3)
    set2DarrayElem(a, 0, 1, -99)
    set2DarrayElem(a, 2, 2, -77)
    set2DarrayElem(a, 4, 0, -88)
    print(a.data)

main()
```