SOLUTION TO THE NUMPY QUESTIONS .

BY – Kshitiz jain

QUESTION 1 :

QUEESTION 1.py > ...

```python
# Write a NumPy program to test whether none of the elements of a given array are zero.

from numpy import *
n=list(map(int,input().split()))
a=array(n,dtype=int)
count=0
for i in a :
    if i==0:
        count+=1
if count==len(a):
    print("ALL elements are zero")
else:
    print("NOT")

# Can ALSO BE DONE BY USING THE ALL FUNCTION IN PYTHON
b= array(n)

if all(b != 0):
  print("no")
else:
  print("yes all the elements are zero")
```

QUESTION 2 :

QUESTION 3.py > ...

```python
# Write a NumPy program to create an array of 10 zeros, 10 ones, and 10 fives.

import numpy as np

zeros = np.zeros(10)
ones = np.ones(10)
fives = np.ones(10) * 5

l=[]

for i in zeros:
        l.append(i)
for j in ones:
    l.append(i)
for z in fives:
    l.append(z)

print(l)
```

QUESTION 3 :

QUESTION 4.py > ...

```python
# Write a NumPy program to create a new array of given shape (5,6) and type, filled with zeros.

import numpy as np

shape=(5,6)
a = np.zeros(shape,dtype=int)
print(a)
```

QUESTION 4 :

QUESTION 5.py > ...

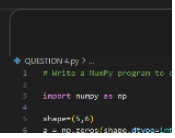
```python
# Write a NumPy program to swap rows and columns of a given array in reverse order.

import numpy as np
n=int(input("enter the number of rows : "))
c=n
ls=[]
for i in range(n):
    ls1=[]
    for j in range(c):
        a=int(input("enter the elments"))
        ls1.append(a)
    ls.append(ls1)

array_n = np.array(ls,dtype=int)

f=np.flip(array_n)

print(f)
```



QUESTION 5

QUESTION 6.py > ...

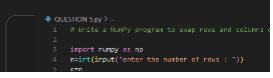
```python
# Write a NumPy program to multiply two given arrays of the same size element-by-element.

import numpy as np

n=list(map(int,input("enter the array 1 : ").split()))
m=list(map(int,input("enter the array 2 : ").split()))

n1=np.array(n)
n2=np.array(m)
if len(m)==len(n):
    multipication = n1 * n2
    print(multipication)
else:
    print("invalid row and coloum ERROR ")

```



: