

In [ ]:

```
#quest1
from array import *

def array():
    #from array import all of the functions
    arr=array('i',[])
    n=int(input("saisir le nombre d'elments du tableau"))
    for i in range (n):
        x=int(input("saisir le nombre"))
        arr.append(x)
    return(arr)

op=array()
liste=op.tolist()
print(liste)
```

In [ ]:

```
#quest2
from numpy import array
matrix=[]
rownb=int(input("print out the number of rows"))
columnb=int(input("print out the number of columns"))
for i in range(rownb):
    row=[]
    for j in range (columnb) :
        ip=int(input("Enter the number"))
        row.append(ip)
    matrix.append(row)
aar=array(matrix)
print(aar.trace())
```

In [ ]:

```
#quest3
from array import *

def array():
    #from array import all of the functions
    arr=array('i',[])
    n=int(input("saisir le nombre d'elments du tableau"))
    x=int(input("saisir un entier "))
    for i in range (n):
        arr.append(x)
    return(arr)

op=array()
liste=op.tolist()
x=int(input("saisir un entier "))
for i in liste :
    if (i>x):
        print(i)
```

In [ ]:

```
#quest4
from numpy import array
from array import *

def array():
    arr=array('i',[])
    n=int(input("saisir le nombre d'elments du tableau"))
    for i in range (n):
        x=int(input("saisir le nombre"))
        arr.append(x)
    liste=arr.tolist()
    addition=[]
    A=array()
    B=array()
    if len (A)==len(B):
        for i in A:
            for j in B:
                addition=A+B
    c=array(addition)
    print(c)
```

In [ ]:

```
#quest5
import numpy as np
print("Original matrix:\n")
X = np.random.rand(5, 10)
print(X)
print("\nSubtract the mean of each row of the said matrix:\n")
Y = X - X.mean(axis=1, keepdims=True)
print(Y)
```