**1. Import the numpy package under the name np**

import numpy as np

**2. Print the numpy version and the configuration**

np.version.version

np.show\_config()

In the command line, type "python --version"

**4. How to find the memory size of any array?**

import sys

sys.getsizeof([1,2, 3]) #Gets the size of the array [1,2,3]

**5. Find indices of non-zero elements from [1,2,0,0,4,0]**

x = [1,2,0,0,4,0]

indicies = []

for i in range(0,len(x)):

if x[i]==0:

indicies.append(i)

print indicies

**6. Create a random vector of size 30 and find the mean value**

a = np.arange(0,30)

for i in range(0,30):

a[i] = random.randint(-1000,10000)

print np.mean(a)

**7. What is the result of the following expressions?**

0 \* np.nan -> nan

np.nan == np.nan - > False

np.inf > np.nan -> False

np.nan - np.nan -> nan

0.3 == 3 \* 0.1 -> False

**8. What is the output of the following script?**

Script:

print(sum(range(5),-1))

from numpy import \*

print(sum(range(5),-1))

Output:

9

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Is the following expressions true?

np.sqrt(-1) == np.emath.sqrt(-1) -> False