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CH.EN.U4CSE20070

Question 1

```
a = int(input("First Number: "))
b = int(input("Last Number: "))

v = []
for i in range(a, b + 1):
    v.append(i)
    for j in range(0, 5):
        v.append(0)
print(v)
```

Question 1 output

```
PS D:\Coding\Python> & C:/Users/qwerk/AppData/Local/Programs/Python/Python37/python.exe d:/Coding/Python/Others/Cognizance/question-1.py
First Number: 3
Last Number: 6
[3, 0, 0, 0, 0, 0, 4, 0, 0, 0, 0, 0, 5, 0, 0, 0, 0, 0, 6, 0, 0, 0, 0, 0]
```

Question 2

```
a = [1, 0, 0, 0, 1, 0]
b = [0, 0, 1, 1, 0, 1]

if a==b:
    print("True")
else:
    print("False")
```

Question 2 output

```
PS D:\Coding\Python> & C:/Users/qwerk/AppData/Local/Programs/Python/Python37/python.exe d:/Coding/Python/Others/Cognizance/question-2.py
False
PS D:\Coding\Python> █
```

Question 3

```
import numpy as np

print(0 * np.nan)
print(np.nan != np.nan)
```

```
print(np.inf > np.nan)
print(np.nan - np.nan)
print(0.3 == 3 * 0.1)
```

Question 3 output

```
PS D:\Coding\Python> & C:/Users/qwerk/AppData/Local/Programs/Python/Python37/python.exe d:/Coding/Python/Others/Cognizance/question-3.py
nan
True
False
nan
False
PS D:\Coding\Python> █
```

Question 4

```
import pandas as pd

ser = pd.Series(['amrita', 'school', 'of', 'engineering', 'chennai',
'campus'])
n = len(ser)
temp=""
for a in range(0, n):
    temp = temp+str(ser.get(key=a)).capitalize()+" "

print(temp)
```

Question 4 output:

```
False
PS D:\Coding\Python> & C:/Users/qwerk/AppData/Local/Programs/Python/Python37/python.exe d:/Coding/Python/Others/Cognizance/question-4.py
Amrita School Of Engineering Chennai Campus
PS D:\Coding\Python> █
```

Question 5

Exercise 1 and 2

```
import numpy as mochi

arr1=mochi.array([[2, -7, 10], [12, -4, 0]])
arr2=mochi.array([[2, -3, 5], [-10, 42, 3]])

arrAdd=mochi.add(arr1,arr2)
arrMul=mochi.multiply(arr1,arr2)
print("Addition of two array:\n",arrAdd)
print("Multiplication of two array:\n",arrMul)
```

```
PS D:\Coding\Python> & C:/Users/qwerk/AppData/Local/Programs/Python/Python37/python.exe d:/Coding/Python/Others/Cognizance/question-5.py
Addition of two array:
[[ 4 -10 15]
 [ 2 38 3]]
Multiplication of two array:
[[ 4 21 50]
 [-120 -168 0]]
PS D:\Coding\Python> █
```