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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)
```

Output:

```
ajairaj@192 pyt % /usr/bin/python3 /Users/ajairaj/Desktop/pyt/1/t1.py
First Number: 2
Last Number: 3
[2, 0, 0, 0, 0, 0, 3, 0, 0, 0, 0, 0]
ajairaj@192 pyt %
```

Question 2:

```
a = [1, 0, 1, 0, 1, 1]
b = [0, 1, 1, 1, 0, 1]
if a==b:
print("True")
else:
print("False")
```

Output:

```
ajairaj@192 pyt % /usr/bin/python3 /Users/ajairaj/Desktop/pyt/t2.py
False
ajairaj@192 pyt %
```

Question 3:

```python
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)
```

Output:

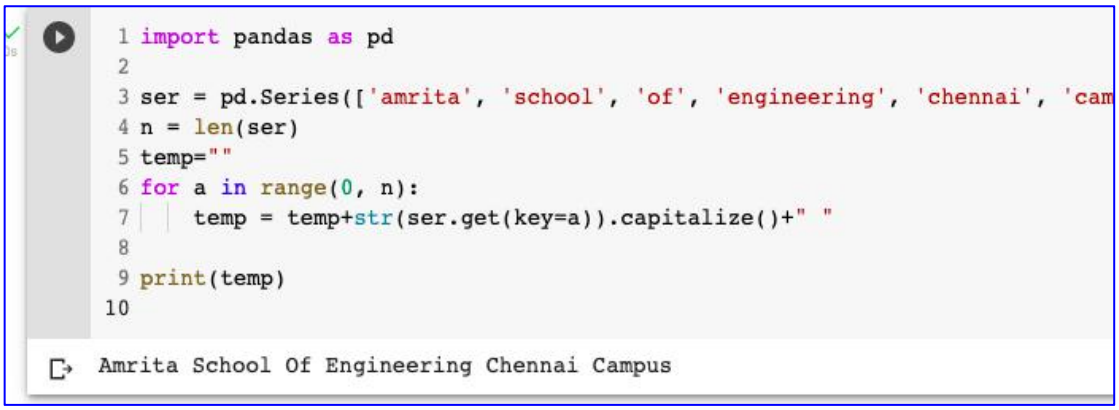
```python
import numpy as np

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)

```

```
nan
True
False
nan
False
```

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)
```

Output:



Question 5:

```
import numpy as fine
arr1=fine.array([[2, -7, 10], [12, -4, 0]])
arr2=fine.array([[2, -3, 5], [-10, 42, 3]])
arrAdd=fine.add(arr1,arr2)
arrMul=fine.multiply(arr1,arr2)
print("Addition of two array:\n",arrAdd)
```

```
print("Multiplication of two array:\n",arrMul)
```

Output:

```
Addition of two array:
 [[  4 -10  15]
 [  2  38   3]]
Multiplication of two array:
 [[   4   21   50]
 [-120 -168    0]]
```