Raul Rodriguez

```python
'''Exercise 1 Similar to the built-in methods arange() and reshape(), shown below,
define and invoke using chain function calls, the myArange() and myReshape() methods in
one line of code as shown in the figure below:
Note: Do not call the built-in methods arange() and reshape()'''
import numpy as np

class myClass:
    def myArrange(self,start,stop):
        l = [x for x in range(start,stop)]
        self.l= l
        print(self.l)
        return self

    def myReshape(self,rows,cols):
        i=0
        self.arr=np.ones((rows,cols),dtype=int)
        for r in range(rows):
            for c in range(cols):
                self.arr[r][c] = self.l[i]
                i=i+1
        return self


obj=myClass()
rows=int(input("Enter number of rows: "))
cols=int(input("Enter number of columns: "))
arrMain=obj.myArrange(1,16).myReshape(rows,cols)
print(f'\n{arrMain.arr}')
```

```
/usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/machinelearning/Lab1_1ML.py
● raulrodriguez@Rauls-Air machinelearning % /usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/machinelearning/Lab1_1ML.py
Enter number of rows: 3
Enter number of columns: 5
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15]

[[ 1  2  3  4  5]
 [ 6  7  8  9 10]
 [11 12 13 14 15]]
○ raulrodriguez@Rauls-Air machinelearning %
```

```python
'''Given the code below, create a Constructor function as well as a print() function that prints
the name, ID, GPA of students'''

class Student:
    def __init__(self,name,id,gpa):
        self.name=name
        self.id=id
        self.gpa=gpa
    def print(self):
        print(self.name,self.id,self.gpa)


s1=Student('Johnny',10,3.39)
s2=Student('Catherine',20,3.82)

s1.print()
s2.print()
```

```
/usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/machinelearning/Lab1_2ML.py
raulrodriguez@Rauls-Air machinelearning % /usr/local/bin/python3 /Users/raulrodriguez/Documents/WorkSpaceVSPython/machinelearning/Lab1_2ML.py
Johnny 10 3.39
Catherine 20 3.82
raulrodriguez@Rauls-Air machinelearning %
```