

## ECE326 Quiz 12, Fall 2019

Name:

Student Number:

Given two increasing series generators, `generator1()` and `generator2()`, we want to merge these two series into another one using a third generator. Please complete `sortedSeriesGenerator()` implementation. Note that you should eliminate duplicates (e.g. the number 10 should not come up twice)

```
def generator1():  
    i = 1  
    while True:  
        yield i  
        i += 7
```

```
def generator2():  
    i = 2  
    while True:  
        yield i  
        i += 3
```

```
def sortedSerieGenerator():  
    gen1, gen2 = generator1(), generator2()
```

```
    # complete the implementation
```

```
    x = next(gen1)  
    y = next(gen2)  
    while True:  
        if x > y:  
            yield y  
            y = next(gen2)  
        elif y > x:  
            yield x  
            x = next(gen1)  
        else:  
            yield x  
            x = next(gen1)  
            y = next(gen2)
```

```
seriesGenerator = sortedSerieGenerator()  
for i in range(1,10):  
    print(next(seriesGenerator))
```