```
In [29]: A_letters = []

         for letter in 'ACADGILD':
             A_letters.append(letter)

         print(A_letters)
```

['A', 'C', 'A', 'D', 'G', 'I', 'L', 'D']

```
In [31]: input_list = ['x','y','z']
         result = [ item*num for item in input_list for num in range(1,5)  ]
         print(str(result))
```

['x', 'xx', 'xxx', 'xxxx', 'y', 'yy', 'yyy', 'yyyy', 'z', 'zz', 'zzz', 'zzzz']

```
In [32]: input_list = ['x','y','z']
         result = [ item*num for num in range(1,5) for item in input_list  ]
         print(str(result))
```

['x', 'y', 'z', 'xx', 'yy', 'zz', 'xxx', 'yyy', 'zzz', 'xxxx', 'yyyy', 'zzzz']

```
In [33]: input_list = [2,3,4]
         result = [ [item+num] for item in input_list for num in range(0,3)]
         print(str(result))
```

[[2], [3], [4], [3], [4], [5], [4], [5], [6]]

```
In [34]: input_list = [2,3,4,5]
         result = [ [item+num for item in input_list] for num in range(0,4)  ]
         print(str(result))
```

[[2, 3, 4, 5], [3, 4, 5, 6], [4, 5, 6, 7], [5, 6, 7, 8]]

```
In [35]: input_list=[1,2,3]
         result = [ (b,a) for a in input_list for b in input_list]
         print(str(result))
```

[(1, 1), (2, 1), (3, 1), (1, 2), (2, 2), (3, 2), (1, 3), (2, 3), (3, 3)]

```
In [ ]:
```