

## QUIZ 4

### COMP9021 PRINCIPLES OF PROGRAMMING

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 1 1
```

```
The generated list is:
```

```
[1]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
1
```

```
The fraction closest to 1/2 is 1
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 3 1
```

```
The generated list is:
```

```
[1, 1, 0]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
0 1
```

```
0 and 1 are both closest to 1/2
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 3 12
```

```
The generated list is:
```

```
[6, 12, 6]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
1/2 1
```

```
One of these fractions is 1/2
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 3 20
```

```
The generated list is:
```

```
[12, 13, 1]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
1/13 1/12 12/13 1
```

```
The fraction closest to 1/2 is 1/12
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 1 4 30
```

```
The generated list is:
```

```
[4, 18, 27, 25]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
4/27 4/25 2/9 2/3 18/25 25/27 1
```

```
The fraction closest to 1/2 is 2/3
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 12 3 5
```

```
The generated list is:
```

```
[3, 2, 5]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
2/5 3/5 2/3 1
```

```
2/5 and 3/5 are both closest to 1/2
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 3 100
```

```
The generated list is:
```

```
[49, 97, 53]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
49/97 53/97 49/53 1
```

```
The fraction closest to 1/2 is 49/97
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 5 30
```

```
The generated list is:
```

```
[27, 12, 24, 28, 13]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
3/7 4/9 13/28 13/27 1/2 13/24 6/7 8/9 12/13 27/28 1
```

```
One of these fractions is 1/2
```

```
$ python3 quiz_4.py
```

```
Enter three nonnegative integers: 0 4 40
```

```
The generated list is:
```

```
[24, 26, 2, 16]
```

```
The fractions no greater than 1 that can be built from L, from smallest to largest, are:
```

```
1/13 1/12 1/8 8/13 2/3 12/13 1
```

```
The fraction closest to 1/2 is 8/13
```