# COMP130 written exam 2

## practice exam solutions

Qu 1

```
def population (country):
    if country != 'Thailand' and country != 'Poland' and country != 'Peru':
        return None
    if country [1] == 'h'
        return 71.6
    if country. endswith ('land'):
        return 38.1

    return 34.6
```

this needs to be first -- otherwise the function gives incorrect behavior for inputs like "Greenland" and "Philippines" (ends in "land" or 2nd letter 'h')

```
    if country. endswith ('land'):
        if country[1] == 'h':
            return 71.6
        return 38.1
```

OR

Qu 2

```
assert population ('Poland') == 38.1
assert population ('Peru') == 34.6
assert population ('xyz') == None
```

## Qn 3

output:

```
abc
a
c
c
a
abcxyz
a
z
c
x
y
b
```

reasoning

```
          -5 -4 -3 -2 -1
           0  1  2  3  4  5
s → 'abc'  abcxyz  abcxyzxyz

i → 0 1 0 7 4
```

## Qn 4

output:

```
-5
comp130
[-5, [3,5,7]]
P13
[8]
abc
```

reasoning

```
                    0      1         2          3
values → [ -5,  [3,5,7],  'comp130',  [8]  ]
                 0 1 2    0 1 2 3 4 5 6      0
                            4       5
                        ... 'abc', 'xyz' ]
```

## Qn 5

Solution is not provided.

Dichotomies:
① money vs contribute to society
② humanities vs CS
③ people vs computers
④ normal vs geeky
⑤ writing vs coding/math

## Qn 6

3.  []
4.  range(i, -1, -1)
5.  append(j)
6.  append(countdown)