

## 1 SQ02

Most hotels and tourist establishments set up shop along Manila Bay, the body of water facing the capital of the Philippines. As these establishments increase in number, so are the heights of their buildings wanting to have a clear view of the bay. Let's look at one slice of a block of buildings. These buildings are drawn from left to right, with the rightmost portion being the Manila Bay. A building has a clear view if all buildings to the right of it are shorter. To simulate the buildings and pick those that have a clear view, we have created a function `get_good_bldgs` that accepts the list of heights of buildings drawn from left to right and returns a list of the buildings that have a clear view of Manila Bay. A possible implementation of this function in Python is shown below.

```
# Represented as a list
# bldgs[0] is the leftmost building
bldgs = [2, 4, 5, 5, 4, 3, 2, 1]

def get_good_bldgs(bldgs):
    good_bldgs_stk = []

    for each_bldg in bldgs:
        while len(good_bldgs_stk) >= 1 and each_bldg
            >= good_bldgs_stk[-1]:
                good_bldgs_stk.pop()

        good_bldgs_stk.append(each_bldg)

    return good_bldgs_stk

get_good_bldgs(bldgs)
```