DISCUSSION GROUP: ☐

STUDENT NUMBER: | A | | | | | | | |

(Write your student number legibly using a **PEN**.)

TOTAL MARKS

0. | A |

1. | C | **2.** | D | **3.** | C | **4.** | B | **5.** | E |

6.
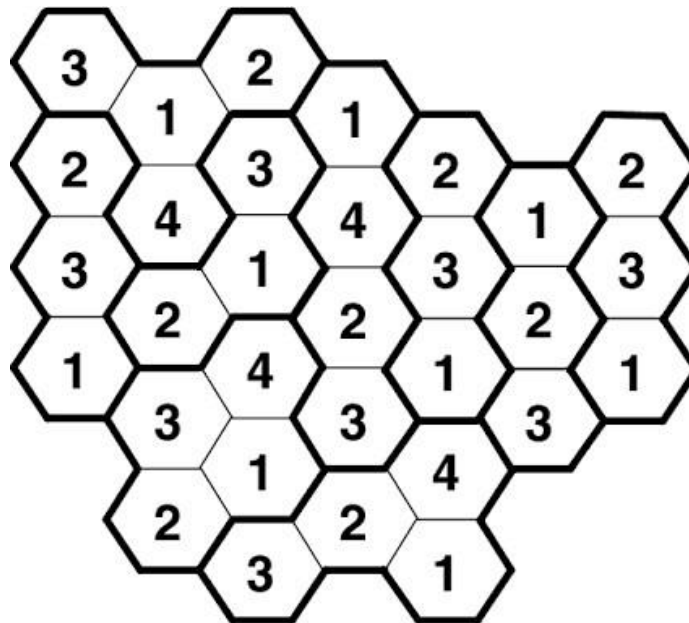[2]

7.
[2]

The function does nothing to the array *list*,
since it swaps each pair of elements twice.

8.
[2]

75 200

9.
[2]

4 4 1 5 0 2 3 0

10.
[4]
```
// Precond: size >=0
void process_array(int arr[], int size) {

    int i;

    for (i=1; i<size; i++) {
        arr[i] = arr[i] + arr[i-1];
    }



}
```

11a.

[3] i.   int prices[] = { 100, 200, 150, 130, 300 };   True or False?   False

ii. int prices[] = { 1, 10, 2, 8 , 2, 7, 2, 5 };   True or False?   True

iii. int prices[] = { 10, 20, 12, 30, 15, 35, 12, 40 };   True or False?   False

11b.
[5]
```
// Precond: size > 0
int favourable(int arr[], int size) {

    int i, low = arr[0];

    for (i=1; i<size; i++) {
        if (arr[i] < low) {
            return 0;
        }
        if (arr[i] < arr[i-1]) {
            low = arr[i];
        }
    }
    return 1;
```

Alternative
```
    int i, fall_index = 0;

    for (i=1; i<size; i++) {
        if (arr[i] < arr[fall_index]) {
            return 0;
        }
        if (arr[i] < arr[i-1]) {
            fall_index = i;
        }
    }
    return 1;
```

```
}
```