

# CSE 160 Section 5 Solutions

## Exercise 1

```
def get_squares(number_list):
    squares = {}
    for number in number_list:
        squares[number] = number ** 2
    return squares
```

## Exercise 2

```
def coldest_city(city_temperatures):
    low_temp = None
    city_return = ''
    for city in city_temperatures:
        city_temp = city_temperatures[city]
        if (low_temp is None) or (city_temp < low_temp):
            low_temp = city_temp
            city_return = city
    return city_return
```

## Exercise 3

### Part 1

```
def pokemon_types(pokemon_dict):
    freq_dict = {}
    for pokemon, pok_type in pokemon_dict.items():
        if pok_type not in freq_dict:
            freq_dict[pok_type] = 0
        freq_dict[pok_type] += 1
    return freq_dict
```

## Part 2

```
def pokemon_types(pokemon_dict):
    result = {}
    for pokemon, pok_type in pokemon_dict.items():
        if pok_type not in result:
            result[pok_type] = []
        result[pok_type].append(pokemon)
    return result
```

## Exercise 4

```
def frequency(word):
    result = {}
    for character in word:
        if character not in result:
            result[character] = 0
        result[character] = result[character] + 1
    return result
```