

CSE 160 Section 7 Solutions

1. # Initialising list of dictionary

```
ini_dict = [{'a':5, 'b':10, 'c':90},
            {'a':45, 'b':78},
            {'a':90, 'c':10}]
# printing initial dictionary
print("initial dictionary", str(ini_dict))
# sum the values with same keys
result = {}
for d in ini_dict:
    for k in d.keys():
        result[k] = result.get(k, 0) + d[k]
print("resultant dictionary : ", str(result))
```

2. def freq(input_string):

```
    result = {}
    for character in input_string:
        if character not in result:
            result[character] = 0
        result[character] = result[character] + 1
    return result
```

3. [('Sam', 5, 6), ('Ann', 7, 8), ('Fred', 3, 5), ('Zeke', 5, 3), ('Mary', 3, 5)]

```
[('Ann', 7, 8), ('Sam', 5, 6), ('Fred', 3, 5), ('Mary', 3, 5), ('Zeke', 5, 3)]
```

4. def get_youngest_person(people):

```
    yp_index = 0
    yp_age = people[0]["age"]
    for i in range(len(people)):
        if people[i]["age"] < yp_age:
            yp_age = people[i]["age"]
            yp_index = i
    return people[yp_index]["name"]
```

5. def word_lengths(input_string):

```
    # Assumes input_string contains at least one letter.
    words = input_string.split(' ')
    len_dict = {}
    for word in words:
```

```
word_len = len(word)
if word_len in len_dict.keys():
    len_dict[word_len].add(word)
else:
    len_dict[word_len] = set([word])
return len_dict
```

```
6. def reverse_dict(to_reverse):
    new_dict = {}
    for key in to_reverse.keys():
        # or for key in to_reverse:
            value = to_reverse[key]
            new_dict[value] = key
    return new_dict
```