

# Python Practice

## Set 2

**Q1. Create a list in python using the followings: 2,3,4,5,6,7 with variable 'a'**

**Add 'mango to the above list**

**Also add banana, grapes & orange in the list**

**insert apple in the 5th position of a variable 'a'**

**Remove last item from the list**

**Q2.**

**L = [1,2,3,4,5,6,7]**

**Using the above list slice from 1:4**

**Q3. Reverse the order of given string L = [4,5,6,8,3] Without using reverse() function.**

**Q4. Use list comprehension to square the given list L=[2,4,7,3,6,8]**

**Q5. Create a function that takes in a tuple of integers and returns the sum of the integers. Test the function with a tuple of your choice.**

**Q6. Create two sets of your favourite fruits, and use the union() method to combine them into a single set. Print the resulting set to the console.**

**Q7. Create a set of random words, and use the add() method to add a new word to the set. Print the resulting set to the console.**

**Q8. Create a set of your favourite animals, and use the remove() method to remove one animal from the set. Print the resulting set to the console.**

**Q9. favorite\_books = {"1984", "To Kill a Mockingbird", "Pride and Prejudice"}  
favorite\_movies = ["The Shawshank Redemption", "The Godfather", "The Dark Knight"]  
Use the zip() function to combine the book set and movie list into a list of tuples representing book/  
movie pairs. Print the resulting list.**

**Q10. Write a Python program to find the difference between consecutive numbers in a list.**

## **Solutions:**

### **# Exercise 6**

```
fruits1 = {"apple", "banana", "pear"}  
fruits2 = {"orange", "grape", "kiwi"}  
combined_fruits = fruits1.union(fruits2)  
print(combined_fruits)
```

### **# Exercise 7**

```
words = {"hello", "world", "python"}  
words.add("programming")  
print(words)
```

### **# Exercise 8**

```
animals = {"dog", "cat", "hamster", "parrot"}
animals.remove("cat")
print(animals)
```

### **# Solution 9**

```
book_movie_pairs = list(zip(favorite_books, favorite_movies))
print(book_movie_pairs)
```

### **# Solutions 10**

```
def find_diff_consecutive_numbers(lst):
    diffs = []
    for i in range(1, len(lst)):
        diff = lst[i] - lst[i-1]
        diffs.append(diff)
    return diffs
```

### **# example usage**

```
my_list = [5, 9, 12, 18, 22]
diffs = find_diff_consecutive_numbers(my_list)
print(diffs) # Output: [4, 3, 6, 4]
```