

### **Exercise 1: Create a list of 5 fruits and print them**

```
fruits = ["apple", "banana", "cherry", "mango", "grape"]  
print(fruits)
```

### **Exercise 2: Add an item to the end of the list**

```
fruits.append("orange")  
print(fruits)
```

### **Exercise 3: Remove a specific item from the list**

```
fruits.remove("banana")  
print(fruits)
```

### **Exercise 4: Sort the list in alphabetical order**

```
fruits.sort()  
print(fruits)
```

### **Exercise 5: Access the 2nd and 4th items using indexing**

```
print(fruits[1])  
print(fruits[3])
```

### **Exercise 6: Create a tuple with 3 numbers and print it**

```
nums = (10, 20, 30)  
print(nums)
```

### **Exercise 7: Try changing an item in a tuple (expect an error)**

```
nums[0] = 100
```

### **Exercise 8: Unpack a tuple into 3 variables**

```
a, b, c = nums  
print(a, b, c)
```

### **Exercise 9: Convert a tuple to a list and modify an item**

```
temp = list(nums)
temp[1] = 99
print(temp)
```

### **Exercise 10: Create a set of numbers with duplicates and print it**

```
s = {1, 2, 2, 3, 4, 4}
print(s)
```

### **Exercise 11: Add a new element to the set**

```
s.add(5)
print(s)
```

### **Exercise 12: Remove an element (use discard to avoid errors)**

```
s.discard(3)
print(s)
```

### **Exercise 13: Find the union and intersection of two sets**

```
a = {1, 2, 3}
b = {3, 4, 5}
print(a | b)
print(a & b)
```

### **Exercise 14: Create a dictionary with keys: name, age, city**

```
person = {"name": "Alice", "age": 25, "city": "New York"}
print(person)
```

**Exercise 15: Access and print the value of 'city'**

```
print(person["city"])
```

**Exercise 16: Add a new key 'email' to the dictionary**

```
person["email"] = "alice@example.com"  
print(person)
```

**Exercise 17: Update the age to a new value**

```
person["age"] = 26  
print(person)
```

**Exercise 18: Delete the 'city' key from the dictionary**

```
del person["city"]  
print(person)
```