

1. Dictionary Basics

a. The following code defines a dictionary `lunch_menu`. Write the output of the code in the box below.

```
lunch_menu = {"monday" : "injera", "tuesday" : "tibs", "wednesday" : "shiro"}  
  
print(lunch_menu["monday"])  
print(lunch_menu["wednesday"])
```

Solution:

```
injera  
shiro
```

The expression `lunch_menu["monday"]` accesses the value associated with the key "monday", which is "injera". Similarly, the value associated with "wednesday" is "shiro".

b. The following code mutates the dictionary `lunch_menu`. Write the output of the code in the box below.

```
lunch_menu["monday"] = "kitfo"  
print(lunch_menu["monday"])
```

Solution:

```
kitfo
```

The assignment changes the value associated with the key "monday" from "injera" to "kitfo".

2. Creating Dictionaries

Add two more key:value pairs to the dictionary defined below. Use the keys "pants" and "socks".

```
number_of_clothes = {}  
number_of_clothes["shirts"] = 3
```

```
-----  
-----
```

Solution: One possible solution is:

```
number_of_clothes = {}  
number_of_clothes["shirts"] = 3  
  
number_of_clothes["pants"] = 2  
number_of_clothes["socks"] = 5
```

The values can be any numbers. The important part is that "pants" and "socks" are used as keys.

3. Iterating Through Dictionaries

Fill in the blanks below.

Your completed code should add all the values in `number_of_clothes` and store the sum in `clothes_total`.

```
clothes_total = 0  
  
for _____ in number_of_clothes:  
    clothes_total += _____  
  
print(clothes_total)
```

Solution:

```
clothes_total = 0  
  
for clothing_type in number_of_clothes:  
    clothes_total += number_of_clothes[clothing_type]  
  
print(clothes_total)
```

The loop variable `clothing_type` takes on each key in `number_of_clothes`. The expression `number_of_clothes[clothing_type]` accesses the value associated with each key.

Using the example values from Question 2, the output is:

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