QUIZ I

Which of these is an *invalid* dictionary (will result in a `TypeError` when trying to run)?

```
{["apple", "orange"]: "fruit", ["broccoli"]: "vegetable", ["salt", "paprika", "saffron"]: "spice"}
```

👏 Lists cannot be the keys of a dictionary, because they are *mutable*.

```
{2: ["apple", "orange"], 1: ["broccoli"], 3: ["salt", "paprika", "saffron"]}
```

```
{"fruit": "apple", "vegetable": 100, "spice": ["salt", "paprika", "saffron"]}
```

What will the following code output?

```
conference_rooms = ["executive", "hopper", "lovelace", "pod", "snooze booth"]
capacity = [7, 20, 6, 2, 1]
room_dict = {key:value for key, value in zip(conference_rooms, capacity)}

print(room_dict)
```

```
[("executive", 7), ("hopper", 20), ("lovelace", 6), ("pod", 2), ("snooze booth", 1)}
```

```
{"executive": 7, "hopper": 20, "lovelace": 6, "pod": 2, "snooze booth": 1}
```

👏 Yes! The `conference_rooms` list becomes the keys, and the `capacity` list becomes the values.

Which of these dictionaries has integers as the *keys* and strings as the *values*?

```
zipcodes = {"Alabama":35801,"Alaska":99501, "Oregon":97201, "Vermont":05751, "New Jersey":07039}
```

```
zipcodes = {35801: "Alabama", "No Value": "N/A", "APO": "Overseas"}
```

```
zipcodes = {35801: ["Huntsville", "Montgomery"], 99501: ["Anchorage"], 97201: ["Portland", "Salem"], 05751:
["Burlington", "Montpelier", "Rutland"], 07039: ["Hoboken"]}
```

```
zipcodes = {35801: "Alabama", 99501: "Alaska", 97201: "Oregon", 05751: "Vermont", 07039: "New Jersey"}
```

👏 Yes! The keys, like **35801**, are integers. The values, like **"Alabama"**, are strings.

What is the value of `inventory` after this code is run?

```
inventory = {"iron spear": 12, "invisible knife": 30, "needle of ambition": 10, "stone glove": 20}

inventory["invisible knife"] = 40
inventory["mithril shield"] = 25
```

```
{"iron spear": 12, "invisible knife": 70, "needle of ambition": 10, "stone glove": 20}
```

```
{"iron spear": 12, "invisible knife": 70, "needle of ambition": 10, "stone glove": 20, "mithril shield": 25}
```

```
{"iron spear": 12, "invisible knife": 40, "needle of ambition": 10, "stone glove": 20, "mithril shield": 25}
```

👏 Yes! The value of **"invisible knife"** has been overwritten and a value for **"mithril shield"** has been added.

What is the line of code to initialize an empty dictionary called `thesaurus`?

```
thesaurus = {}
```

👏 Correct! Empty {} brackets create an empty dictionary.

```
thesaurus = empty_dict()
```

```
thesaurus = []
```

```
thesaurus = new Dictionary()
```