

EXAM REVIEW

NESTED DICTIONARIES

Naila @ JamCoders 2026 - lab w4d4a

WHAT IS A DICTIONARY?

A **dictionary** is a Python structure that contains elements with the following components:

- A **key** - used to look up values. Its type needs to be hashable (in practice, it cannot be a list).
- A **value** - the contents stored inside the entry of the key (could be of any type).

Remember: the keys have to be unique.

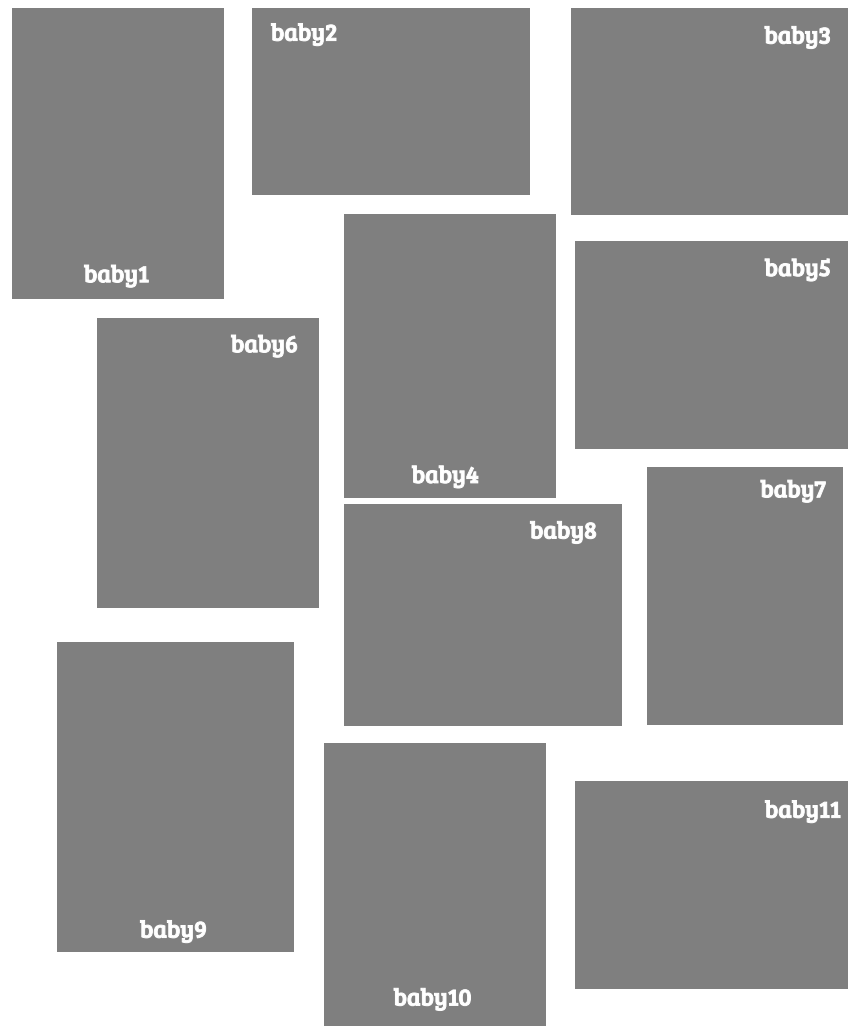
NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": _____,  
        "siblings": [ _____,  
                     _____,  
                     _____,  
                     _____,  
                     _____ ]  
    }  
}
```

- How many elements in **fav_tas**?
How can you compute this using Python?
- How many elements are in **fav_tas["Andrey"]**?
How can you compute this using Python?
- Ready! Let's fill in the gaps.

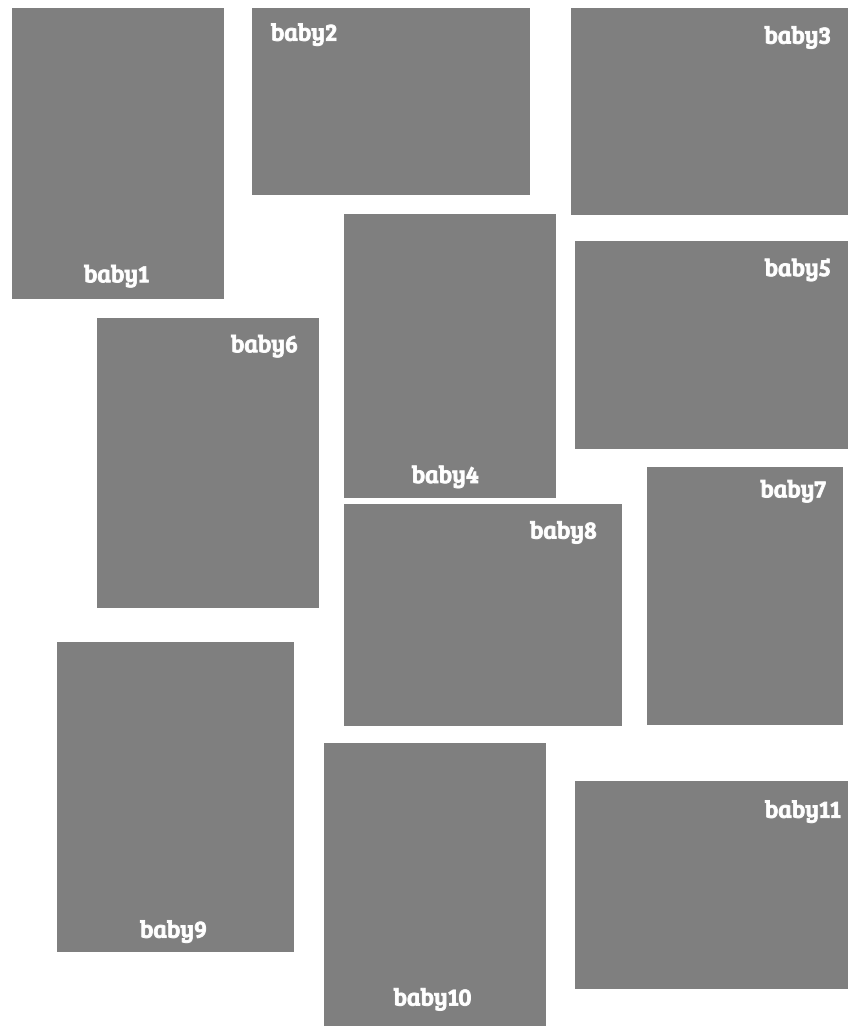
NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": _____,  
        "siblings": [ _____,  
                      _____,  
                      _____,  
                      _____,  
                      _____ ]  
    }  
}
```



NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ _____,  
                     _____,  
                     _____,  
                     _____,  
                     _____ ]  
    }  
}
```



NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ _____,  
                     _____,  
                     _____,  
                     _____,  
                     _____ ]  
    }  
}
```



NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    }  
}
```



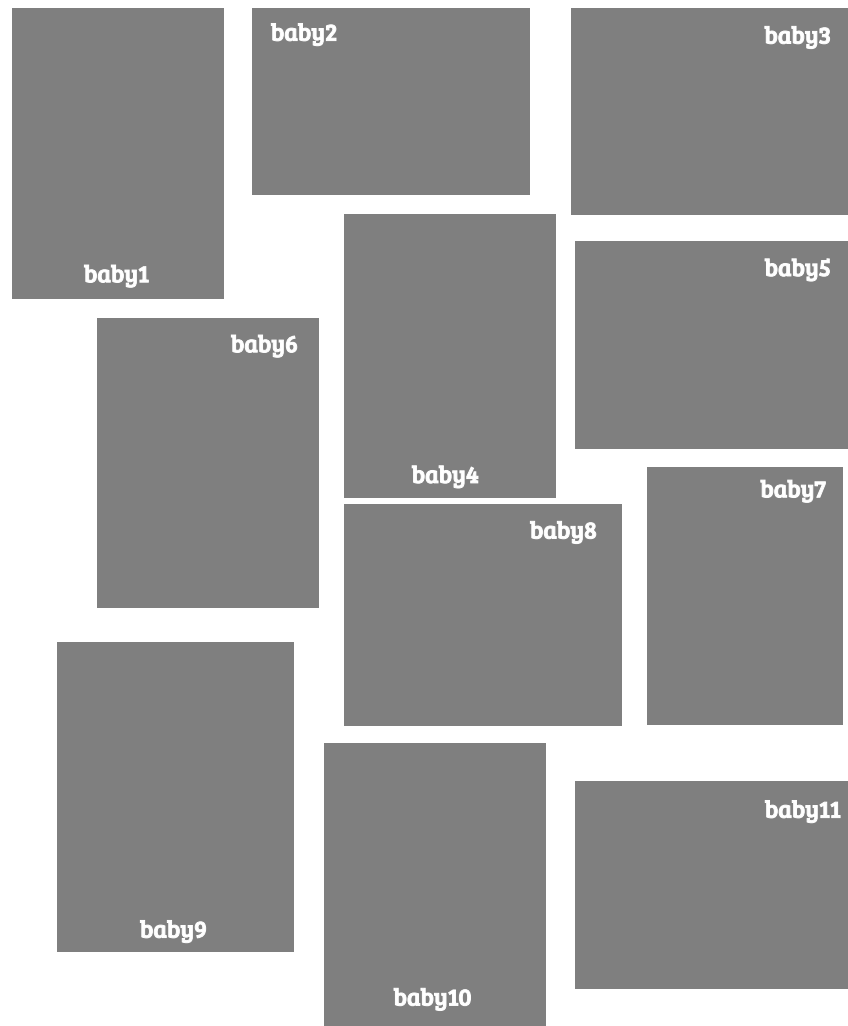
NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby10",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```

Are we happy with this dictionary?

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby10",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```



NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby10",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```

How do we change the picture name?

```
# YOUR CODE HERE
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby10",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```

How do we change the picture name?

```
fav_tas["Kanav"]["baby"] = "baby11"
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```

How do we add Lysandra to the sibs?

```
# YOUR CODE HERE
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin" ]  
    }  
}
```

How do we add Lysandra to the sibs?

```
fav_tas["Kanav"]["siblings"].append(  
    "Princess"  
)
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": {  
        "baby": "baby4",  
        "siblings": [ "Amir",  
                      "Christin",  
                      "I-Jeanae",  
                      "Micah",  
                      "Sara" ]  
    },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}
```

How do we add Lysandra to the sibs?

```
fav_tas["Kanav"]["siblings"].append(  
    "Princess"  
)
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": { ... },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}
```

How do we add Mallika to the dict?

```
# YOUR CODE HERE
```

NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": { ... },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}
```

How do we add Mallika to the dict?

```
fav_tas["Mallika"] = {  
    "baby": _____,  
    "siblings": [ _____,  
                 _____,  
                 _____,  
                 _____,  
                 _____ ]  
}
```

NESTED DICTIONARIES

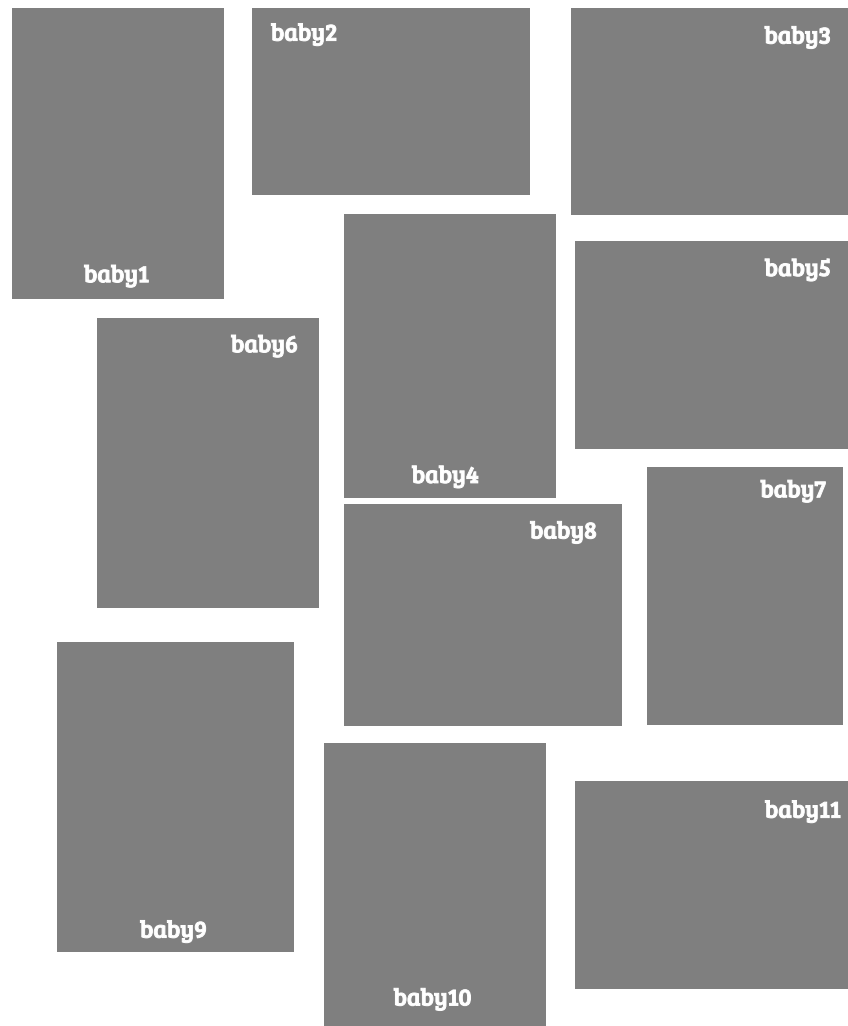
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fav_tas = {  
    "Andrey": { ... },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}
```

How do we add Mallika to the dict?

```
fav_tas["Mallika"] = {  
    "baby": _____,  
    "siblings": [ "Alexia",  
                  "Shaqualla",  
                  "Josh",  
                  "Raheem",  
                  "Zennia" ]  
}
```

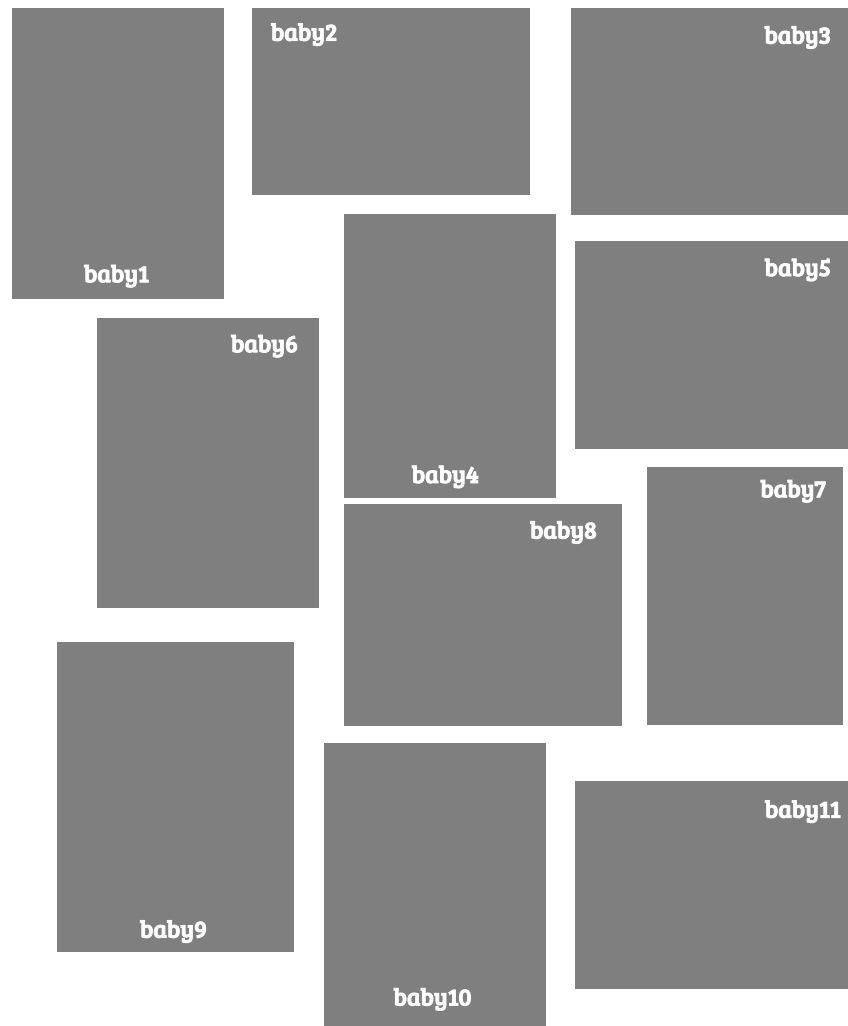
NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": { ... },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}  
fav_tas["Mallika"] = {  
    "baby": -----,  
    "siblings": [ "Alexia",  
                  "Shaqualla",  
                  "Josh",  
                  "Raheem",  
                  "Zennia" ]  
}
```



NESTED DICTIONARIES

```
fav_tas = {  
    "Andrey": { ... },  
    "Kanav": {  
        "baby": "baby11",  
        "siblings": [ "Angel-Lee",  
                      "Jevontae",  
                      "Tahlia",  
                      "Yatin",  
                      "Princess" ]  
    }  
}  
fav_tas["Mallika"] = {  
    "baby": "baby8",  
    "siblings": [ "Alexia",  
                  "Shaqualla",  
                  "Josh",  
                  "Raheem",  
                  "Zennia" ]  
}
```



THE END

We hope you enjoyed this camp's labs.

We tried to do our best for you ❤️

Congratulations on making it all the way here!

SOLUTION...

