WEEK 6 - ASSIGNMENT 1 DICTIONARY / LIST SORTING

NOTE:

- **No need to submit anywhere, just keep track of all the PDF you made in a specific folder.**
- **Compare your solution with the solution I'll provide, in case of doubts, kindly reach out to me.**
- **You may get assignment solution in format of PDF or VIDEO solution, depending on the difficulty level.**

Q1. Here's a students data and their marks.

```
student_data = {
   "Alice": [85, 90, 88, 92, 89],
   "Bob": [78, 82, 79, 81, 80],
   "Charlie": [92, 95, 88, 85, 91],
   "Diana": [76, 80, 79, 82, 85],
   "Eva": [88, 92, 85, 90, 87],
   "Frank": [83, 85, 80, 86, 88],
   "Gina": [90, 87, 92, 88, 86],
}
```

Display the name of student and total marks in ascending order.

OUTPUT:

Bob has scored 400

Diana has scored 402

Frank has scored 422

Eva has scored 442

Gina has scored 443

Alice has scored 444

Charlie has scored 451

Q2. Here’s student data.

```
student_data = {
    "Ella": {"age": 20, "marks": [85, 78, 92, 89, 91]},
    "Max": {"age": 22, "marks": [79, 85, 88, 90, 87]},
    "Sophia": {"age": 21, "marks": [92, 95, 88, 85, 91]},
    "Liam": {"age": 23, "marks": [76, 80, 79, 82, 85]},
    "Ava": {"age": 20, "marks": [88, 92, 85, 90, 87]},
    "Noah": {"age": 22, "marks": [83, 85, 80, 86, 88]},
    "Emma": {"age": 21, "marks": [90, 87, 92, 88, 86]},
}
```

Generate the outcome like this.

Liam has scored 402

Noah has scored 422

Max has scored 429

Ella has scored 435

Ava has scored 442

Emma has scored 443

Sophia has scored 451

Q3. Here’s a student data with name, age, city, total marks.

```
student_data = [
    ["Samantha", 18, "New York", 420],
    ["David", 25, "Los Angeles", 380],
    ["Sophie", 22, "Chicago", 390],
```

```
    ["Michael", 20, "Houston", 410],
    ["Liam", 19, "Phoenix", 430],
    ["Olivia", 21, "Philadelphia", 400],
    ["Daniel", 23, "San Antonio", 375],
]
```

Sort this list according to total marks and print it.

OUTPUT:

```
[
    ["Daniel", 23, "San Antonio", 375],
    ["David", 25, "Los Angeles", 380],
    ["Sophie", 22, "Chicago", 390],
    ["Olivia", 21, "Philadelphia", 400],
    ["Michael", 20, "Houston", 410],
    ["Samantha", 18, "New York", 420],
    ["Liam", 19, "Phoenix", 430],
]
```

Q4. Here's a student data, Sort this data via total marks and print it.

```
student_data = [
    {"Sophia": {"age": 21, "marks": [92, 95, 88, 85, 91]}},
    {"Max": {"age": 22, "marks": [79, 85, 88, 90, 87]}},
    {"Liam": {"age": 23, "marks": [76, 80, 79, 82, 85]}},
    {"Ava": {"age": 20, "marks": [88, 92, 85, 90, 87]}},
    {"Noah": {"age": 22, "marks": [83, 85, 80, 86, 88]}},
    {"Emma": {"age": 21, "marks": [90, 87, 92, 88, 86]}},
    {"Olivia": {"age": 24, "marks": [82, 86, 90, 87, 84]}},
]
```

OUTPUT

Liam has scored 402

Noah has scored 422

Max has scored 429

Olivia has scored 429

Ava has scored 442

Emma has scored 443

Sophia has scored 451

Q5. Here's a student data. The first 3 elements are marks of student. Sort this list and print it.

```
student_data = [
   [78, 92, 85, "Alice"],
   [82, 79, 81, "Bob"],
   [92, 88, 85, "Charlie"],
   [80, 79, 82, "Diana"],
   [92, 85, 90, "Eva"],
   [85, 80, 86, "Frank"],
   [87, 92, 88, "Gina"]
]
```

OUTPUT

Diana has scored 241

Bob has scored 242

Frank has scored 251

Alice has scored 255

Charlie has scored 265

Eva has scored 267

Gina has scored 267