```python
students = {
    "S001": {
        "name": "Alice Chen",
        "courses": {
            "CS101": {"grade": 92, "credits": 3},
            "MATH201": {"grade": 88, "credits": 4},
            "AI301": {"grade": 95, "credits": 3},
        },
        "advisor": "Dr. Smith",
    },
    "S002": {
        "name": "Bob Lee",
        "courses": {
            "CS101": {"grade": 85, "credits": 3},
            "MATH201": {"grade": 90, "credits": 4},
        },
        "advisor": "Dr. Patel",
    },
}

ss = students\
    ["S001"]\
    ["courses"]\
    ["AI301"]
print(ss)


r = students\
    ["S001"]\
    ["courses"]\
    ["CS101"]\
    ["grade"]

y = students\
    ["S001"]\
    ["courses"]\
    ["MATH201"]\
    ["grade"]




if r >= 96:
    print("A+, GPA=5")
elif r >= 90:
```

```python
    print("A, GPA=4")
elif r >= 85:
    print("B, GPA=3.5")
elif r >= 70:
    print("c, GPA=3")
else:
    print("F")


if y >= 96:
    print("A+, GPA=5")
elif y >= 90:
    print("A, GPA=4")
elif y >= 85:
    print("B, GPA=3.5")
elif y >= 70:
    print("c, GPA=3")
else:
    print("F")



t = students\
    ["S001"]\
    ["name"]

m = students\
    ["S002"]\
    ["name"]
print("\n", "name1:", t, "\n")
print("name2:", m, "\n")



q = students\
    ["S001"]\
    ["courses"]\
    ["CS101"]\
    ["grade"]
qq = students\
    ["S001"]\
    ["courses"]\
    ["MATH201"]\
    ["grade"]
qqq = students\
    ["S001"]\
    ["courses"]\
    ["AI301"]\
    ["grade"]
x = q + qq + qqq
xx = x / 3
```

```python
print("Average score for Alice Chen:", xx)




l = students\
    ["S002"]\
    ["courses"]\
    ["CS101"]\
    ["grade"]
ll = students\
    ["S002"]\
    ["courses"]\
    ["MATH201"]\
    ["grade"]


n = l + ll
nn = n / 2
print("Average score for Bob Lee:", nn)



if nn >= 96:
    print("A+, GPA=5")
elif nn >= 90:
    print("A, GPA=4")
elif nn >= 85:
    print("B, GPA=3.5")
elif nn >= 70:
    print("c, GPA=3")
else:
    print("F")

if xx >= 96:
    print("A+, GPA=5")
elif xx >= 90:
    print("A, GPA=4")
elif xx >= 85:
    print("B, GPA=3.5")
elif xx >= 70:
    print("c, GPA=3")
else:
    print("F")

if xx > nn:
```

```python
    print("\n", "Based on GPA, Alice Chen has a higher GPA than Bob
Lee!!.")
else:
    print("\n", "Based on the cumulative grade point average (GPA),
Bob Lee's GPA is higher than Alice Chen's!!.")
```