1. تحتاج الإدارة التعليمية لتقييم أداء المدارس خلال الفترة الماضية، ولذلك قررت أن تقارن متوسط إجمالي الدرجات التي حصل عليها طلاب كل مدرسة كما يلي، وبالتأكيد نحن من سنساعدهم في إجابة هذا السؤال، وستجد بالأسفل عينة صغيرة من بيانات المدارس داخل الإدارة التعليمية (إذا كان لدينا ألف طالب أو عشر ألاف طالب سيستطيع برنامجنا تأدية نفس الوظيفة، فالمفهوم والكود سيكون نفسه، وسيستطيع برنامجنا بالفعل مساعدة الإدارة التعليمية على الحصول على إجابة هذا السؤال)

Make a program to help educational administration to know the average total percentage of each school like the following.

```
The Average Total Percentage for Codezilla School is 95.40
The Average Total Percentage for Al-Azhar School is 94.55
```

{codezilla}

إذا لم توفق للوصول للحل يمكنك السعي مرة أخرى بمساعدة الخطوات التالية

```python
# dict to store the total percentage for each school

# list to store the total percentage for each student

# loop through the schools

# loop through the students in the current school

# get the grades of the current student

# get the total percentage of the current student

# add the current student & his total percentage to the
students_total_percentage dict

# get the average total percentage for the students in the
current school

# add the current school and its average total percentage to
the schools_average_percentage dict

# clear the students_total_percentage list for the next school

# print the average total percentage for each school
```

```python
1   # dict to store the total percentage for each school
2   schools_average_percentage = {}
3
4   # list to store the total percentage for each student
5   students_total_percentage = []
6
7
8   # loop through the schools
9   for school in schools:
10      # loop through the students in the current school
11      for student in schools[school]:
12          # get the grades of the current student
13          subjects_grades = schools[school][student]
14
15          # get the total percentage of the current student
16          total_percentage = sum(subjects_grades.values()) / len(subjects_grades)
17
18          # add the current student & his total percentage to the students_total_percentage dict
19          students_total_percentage.append(total_percentage)
20
21      # get the average total percentage for the students in the current school
22      school_average_percentage = sum(students_total_percentage) / len(students_total_percentage)
23
24      # add the current school and its average total percentage to the schools_average_percentage dict
25      schools_average_percentage[school] = school_average_percentage
26
27      # clear the students_total_percentage list for the next school
28      students_total_percentage = []
29
30
31  # print the average total percentage for each school
32  for school, school_total_percentage in schools_average_percentage.items():
33      print(f"The Average Total Percentage for {school} School is {school_total_percentage:.2f}")
```

2.قم بعمل برنامج لمقهى كودزيلا بحيث يتفاعل مع المستخدم
بالشكل التالي

Make a program for Codezilla Cafe that interacts
with the user like the following.

القائمة المتاحة

```python
# available items
hot_drinks = {"Coffee": 20, "Tea": 15, "Hot Chocolate": 25}
cold_drinks = {"Soda": 10, "Iced Tea": 15, "Smoothie": 30}
desserts = {"Ice Cream": 50, "Chocolate Cake": 60,
"Cheesecake": 70}
```

```python
# available items
hot_drinks = {"Coffee": 20, "Tea": 15, "Hot Chocolate": 25}
cold_drinks = {"Soda": 10, "Iced Tea": 15, "Smoothie": 30}
desserts = {"Ice Cream": 50, "Chocolate Cake": 60, "Cheesecake": 70}

# full menu
menu = {"Hot Drinks": hot_drinks, "Cold Drinks": cold_drinks, "Desserts": desserts}

# greet the user
print("Welcome to Codezilla Cafe")


# store the order
order = {}

while True:
    # print the types of the items
    for i, item_type in enumerate(menu):
        print(f"{i+1}. {item_type}")

    # get the user choice
    choice = input("Please, Enter the Number of the Item Type(Enter to exit): ")

    # if the user chooses to exit
    if choice == "":
        break

    # get the type of the item
    item_type_name = list(menu)[int(choice) - 1]

    # print the items of the type
    item_type = menu[item_type_name]
    for i, item in enumerate(item_type):
        item_price = item_type[item]
        print(f"{i+1}. {item}: {item_price} EGP")

    # get the user choice
    choice = input("Enter Item Number: ")

    # get the item name
    item_name = list(item_type)[int(choice) - 1]

    # get the price of the item
    item_price = item_type[item_name]

    # get the quantity of the item
    item_quantity = int(input("Please Enter Quantity: "))

    # calculate the total price of the item
    item_total = item_price * item_quantity

    # add the order to the order dictionary
    order[item_name] = {"price": item_price, "quantity": item_quantity, "total": item_total}
```

```python
45
46        # get the quantity of the item
47        item_quantity = int(input("Please Enter Quantity: "))
48
49        # calculate the total price of the item
50        item_total = item_price * item_quantity
51
52        # add the order to the order dictionary
53        order[item_name] = {"price": item_price, "quantity": item_quantity, "total": item_total}
54
55
56
57 # calculate the total order price
58 total_orders = [order[item]["total"] for item in order]
59 total_orders_price = sum(total_orders)
60
61 # print the order
62 print("-" * 20)
63 print("Your order is:")
64 print("-" * 20)
65 for item in order:
66     item_info = f"""Item: {item}
67 Price: {order[item]['price']} EGP
68 Quantity: {order[item]['quantity']} units
69 Total: {order[item]['total']} EGP"""
70     print(item_info)
71     print("-" * 20)
72
73 # print the total order price
74 print(f"Total Order: {total_orders_price} EGP")
```

{codezilla}