Jhackie Rhoze

1. # Define the data  
   heightandweight = ["James", 73, 1.82, "Peter", 78, 1.80, "Jay", "Beth", 65, 1.53, "Mags", 66, 1.50, "Joy", 62, 1.34]
2. # Initialize variables to keep track of the current person's data  
   current\_name = ""  
   current\_height = 0  
   current\_weight = 0  
     
   # Initialize a list to store all the records  
   records = []
3. # Iterate through the list and group the data  
   for item in heightandweight:  
    if isinstance(item, str):  
    # If it's a string, it's the person's name  
    current\_name = item  
    elif isinstance(item, (int, float)):  
    # If it's a number, it's either height or weight  
    if current\_height == 0:  
    current\_height = item  
    else:  
    current\_weight = item  
    # Store the data for the current person in a dictionary  
    person\_data = {  
    "Name": current\_name,  
    "Height": current\_height,  
    "Weight": current\_weight  
    }  
    records.append(person\_data)  
    # Reset the variables for the next person  
    current\_name = ""  
    current\_height = 0  
    current\_weight = 0
4. # Print out the data for each person  
   for record in records:  
    print(f"Name: {record['Name']}, Height: {record['Height']} inches, Weight: {record['Weight']} meters")

# Define the data  
heightandweight = [  
 "James", 73, 1.82,  
 "Peter", 78, 1.80,  
 "Jay", "Beth", 65, 1.53,  
 "Mags", 66, 1.50,  
 "Joy", 62, 1.34  
]  
  
# Initialize variables to keep track of total height and total weight  
total\_height = 0  
total\_weight = 0  
  
# Initialize a counter for the number of people  
num\_people = 0  
  
# Initialize variables to keep track of the current person's data  
current\_name = ""  
current\_height = 0  
current\_weight = 0  
  
# Iterate through the list and calculate the total height and total weight  
for item in heightandweight:  
 if isinstance(item, str):  
 # If it's a string, it's the person's name  
 current\_name = item  
 elif isinstance(item, (int, float)):  
 # If it's a number, it's either height or weight  
 if current\_height == 0:  
 current\_height = item  
 else:  
 current\_weight = item  
 # Update the total height and total weight  
 total\_height += current\_height  
 total\_weight += current\_weight  
 # Increment the number of people  
 num\_people += 1  
 # Reset the variables for the next person  
 current\_name = ""  
 current\_height = 0  
 current\_weight = 0  
  
# Calculate the average height and average weight  
if num\_people > 0:  
 average\_height = total\_height / num\_people  
 average\_weight = total\_weight / num\_people  
 print(f"Average Height: {average\_height} inches")  
 print(f"Average Weight: {average\_weight} meters")  
else:  
 print("No data found to calculate averages.")

# Define the data  
heightandweight = [  
 "James", 73, 1.82,  
 "Peter", 78, 1.80,  
 "Jay", "Beth", 65, 1.53,  
 "Mags", 66, 1.50,  
 "Joy", 62, 1.34  
]  
  
# Initialize variables to keep track of total height and total weight for men and women  
total\_height\_men = 0  
total\_weight\_men = 0  
total\_height\_women = 0  
total\_weight\_women = 0  
  
# Initialize counters for the number of men and women  
num\_men = 0  
num\_women = 0  
  
# Initialize variables to keep track of the current person's data  
current\_name = ""  
current\_height = 0  
current\_weight = 0  
  
# Iterate through the list and calculate the total height and total weight for men and women  
for item in heightandweight:  
 if isinstance(item, str):  
 # If it's a string, it's the person's name  
 current\_name = item  
 # Determine the gender based on the name (assuming simple gender distinction)  
 if current\_name.lower() in ["james", "peter"]:  
 current\_gender = "Male"  
 else:  
 current\_gender = "Female"  
 elif isinstance(item, (int, float)):  
 # If it's a number, it's either height or weight  
 if current\_height == 0:  
 current\_height = item  
 else:  
 current\_weight = item  
 # Update the total height and total weight based on gender  
 if current\_gender == "Male":  
 total\_height\_men += current\_height  
 total\_weight\_men += current\_weight  
 num\_men += 1  
 elif current\_gender == "Female":  
 total\_height\_women += current\_height  
 total\_weight\_women += current\_weight  
 num\_women += 1  
 # Reset the variables for the next person  
 current\_name = ""  
 current\_height = 0  
 current\_weight = 0  
  
# Calculate the average height and average weight for men and women  
if num\_men > 0:  
 average\_height\_men = total\_height\_men / num\_men  
 average\_weight\_men = total\_weight\_men / num\_men  
 print(f"Average Height for Men: {average\_height\_men} inches")  
 print(f"Average Weight for Men: {average\_weight\_men} meters")  
else:  
 print("No data found for men.")  
  
if num\_women > 0:  
 average\_height\_women = total\_height\_women / num\_women  
 average\_weight\_women = total\_weight\_women / num\_women  
 print(f"Average Height for Women: {average\_height\_women} inches")  
 print(f"Average Weight for Women: {average\_weight\_women} meters")  
else:  
 print("No data found for women.")