Session 2. Conditional Execution and Functions (Solutions Only)

1. Conditional Execution

Q1. Basestock Policy in Inventory Management

Write a program that asks the user for the current inventory level. If the inventory is at least equal to the target level of 100, then output "Sufficient inventory. No need to order."

Otherwise, output "Order x units", where x is the target minus the current inventory.

```
[1]: basestock=100
     inventory=input('Current inventory: ')
     inventory=int(inventory)
     if inventory>=basestock:
         print('Sufficient inventory. No need to order.')
     else:
         print(f'Order {basestock-inventory} units.')
```

```
Current inventory: 75
Order 25 units.
```

Q2. Blood Sugar Checker

Write a program that asks the user how many hours they have fasted and their current blood sugar level.

- If they have fasted less than 2 hours, then output "You need to fast at least 2 hours to perform this test."
- If they fasted at least 2 hours but less than 8 hours, then output "Your blood sugar level is high" if it is more than 140, and "Your blood sugar level is normal" otherwise.
- If they have fasted for at least 8 hours, then the threshold for normal sugar level changes from 140 to 100.

```
[2]: hours=float(input('How many hours have you fasted: '))
     level=float(input('What is your blood sugar level: '))
     high_msg='Your blood sugar level is high.'
     low_msg='Your blood suguar level is normal.'
     if hours<2:
         print('You need to fast at least 2 hours to perform this test.')
     elif hours<8:
         if level>140:
             print(high_msg)
         else:
             print(low_msg)
     else:
         if level>100:
             print(high_msg)
         else:
             print(low_msg)
```

```
How many hours have you fasted: 2
What is your blood sugar level: 110
Your blood suguar level is normal.
```