Problem 1.

For this program, you are tasked to define the following:

Class - Money:

- Public Properties:
  - `amount` (type: int): Represents the monetary amount.
  - `denomination` (type: str): Specifies the denomination or currency type.
- Constructor:
  - `__init__(self, amount: int = 0, denomination: str = "Unknown")`:
    - This constructor can be used in three ways:
      - When called with no parameters, it initializes `amount` to 0 and `denomination` to "Unknown". This constructor is used when no specific monetary details are provided, setting default values.
      - When called with only the `amount` as a parameter, it sets the `amount` property accordingly and sets `denomination` to "Unknown". This constructor is useful when only the `amount` is known, but the `denomination` is not specified.
      - When called with both `amount` and `denomination` as parameters, it sets the respective properties to these values. This constructor is used when complete information about the monetary value, including its `denomination`, is available.

Note: Each class should be defined in its own file, with the file name following camelCase conventions (e.g., `bankAccount.py`).

Create a test class on a separate file named **testMoney.py**

Then try the sample output below:

CODE:

money.py

```
4 usages
class Money:
    def __init__(self, amount: int = 0, denomination: str = "Unknown"):
        self.amount = amount
        self.denomination = denomination

    def __str__(self):
        return (f"Action: Invoking the Money class constructor using Money({self.amount} {self.denomination})")
```

testMoney.py

```
1 usage
def test_money():
        m1 = Money()
        print(f"Action: Invoking the Money class constructor using Money()")
        print("Output:")
        print(f"Amount: {m1.amount}")
        print(f"Denomination: {m1.denomination}")
        m2 = Money(100)
        print(f"Action: Invoking the Money class constructor using Money({m2.amount})")
        print("Output:")
        print(f"Amount: {m2.amount}")
        print(f"Denomination: {m2.denomination}")
        m3 = Money( amount: 100,  denomination: "USD")
        print(f"Action: Invoking the Money class constructor using Money({m1.amount}, {m3.denomination})")
        print("Output:")
        print(f"Amount: {m3.amount}")
        print(f"Denomination: {m3.denomination}")

if __name__ == '__main__':
        test_money()
```

OUTPUT:

```
Run:  testMoney
C:\Users\CDMLAB\AppData\Local\Programs\Python\Python311\python.exe C:\Users\CDMLAB\PycharmProjects\pythonProject\testMoney.py
Action: Invoking the Money class constructor using Money()
Output:
Amount: 0
Denomination: Unknown
Action: Invoking the Money class constructor using Money(100)
Output:
Amount: 100
Denomination: Unknown
Action: Invoking the Money class constructor using Money(0, USD)
Output:
Amount: 100
Denomination: USD
```