Coding Challenge:

Create a Python program that calculates the total cost of items in a shopping cart, applies a discount, and determines if the customer is eligible for free shipping.

1. Ask the user to enter the price of three items (as floats).
2. Calculate the total price of the items.
3. If the total price is greater than or equal to $100, apply a 10% discount.
4. Determine if the user qualifies for free shipping (free shipping is available for orders $50 or more after the discount).
5. Print the total cost after the discount and whether free shipping applies.

Solution:

```
# Getting prices of three items
item1 = float(input("Enter the price of item 1: "))
item2 = float(input("Enter the price of item 2: "))
item3 = float(input("Enter the price of item 3: "))

# Calculating total price
total_price = item1 + item2 + item3

# Applying discount if eligible
if total_price >= 100:
    total_price *= 0.9  # Apply 10% discount

# Checking free shipping eligibility
if total_price >= 50:
    free_shipping = True
else:
    free_shipping = False

# Outputting results
print(f"Total cost after discount: ${total_price:.2f}")
if free_shipping:
    print("You qualify for free shipping!")
else:
    print("You do not qualify for free shipping.")
```

Example Output:

```
Enter the price of item 1: 40
Enter the price of item 2: 35
Enter the price of item 3: 30
```

Total cost after discount: $94.5
You qualify for free shipping!

Multiple Choice Questions:

MCQ 1: What is the result of the following operation in Python?

```
x = 15
y = 4
print(x // y)
```

A. 3.75
B. 4
C. 3
D. 3.5

Answer: C

MCQ 2: Which of the following logical operators returns `True` if at least one condition is `True`?

A. `and`
B. `or`
C. `not`
D. `==`

Answer: B

MCQ 3: What is the result of the following comparison in Python?

```
x = 10
y = 20
print(x > y or x == 10)
```

A. True
B. False
C. None
D. Error

Answer: A