

Coding Challenge:

Create a Python program that checks if a user is eligible for a discount based on their age and membership status.

1. Ask the user to input their age and whether they are a member (Yes/No).
2. If the user is under 18 or a member, they receive a 20% discount.
3. Otherwise, they receive no discount.
4. Print the discount percentage and a thank-you message.

Solution:

```
# Getting user inputs
age = int(input("Enter your age: "))
membership_status = input("Are you a member (Yes/No)? ").strip().lower()

# Determine discount eligibility
discount = 0
if age < 18 or membership_status == "yes":
    discount = 20

# Output the results
if discount > 0:
    print(f"You are eligible for a {discount}% discount. Thank you!")
else:
    print("You are not eligible for a discount. Thank you!")
```

Example Output:

```
Enter your age: 16
Are you a member (Yes/No)? Yes
You are eligible for a 20% discount. Thank you!
```

Multiple Choice Questions:

MCQ 1: What is the purpose of the `elif` statement in Python?

- A. To execute code when the previous `if` condition is True.
- B. To check additional conditions after the `if` statement.
- C. To provide a default case when no conditions are True.
- D. To repeat a block of code.

Answer: B

MCQ 2: What will the following code print?

```
age = 25
if age < 18:
    print('Minor')
elif age < 60:
    print('Adult')
else:
    print('Senior')
```

- A. Minor
- B. Adult
- C. Senior
- D. Error

Answer: B

MCQ 3: What is the output of the following code?

```
has_id = False
age = 20
if age >= 18:
    if has_id:
        print('Entry Allowed')
    else:
        print('ID Required')
else:
    print('Underage')
```

- A. Entry Allowed
- B. ID Required
- C. Underage
- D. Error

Answer: B