Start coding or generate with AI.

```python
# 1. Check Discount Eligibility
def check_discount_eligibility(total_purchase):
  if total_purchase > 100:
    final_price = total_purchase * (1 - 0.10)  # Apply 10% discount
  else:
    final_price = total_purchase
  return final_price
```

```python
# 2. Calculate Bulk Discount
def calculate_bulk_discount(num_items, total_price):
  if num_items > 5:
    total_price *= (1 - 0.15)  # Apply 15% discount
  return total_price
```

```python
# 3. Membership Discount
def membership_discount(is_member, total_price):
  if is_member:
    discounted_price = total_price * (1 - 0.20)  # 20% for members
  else:
    discounted_price = total_price * (1 - 0.05)  # 5% for non-members
  return discounted_price
```

```python
# 4. Seasonal Sale
def seasonal_sale(is_holiday, total_price):
  if is_holiday:
    price_after_discount = total_price * (1 - 0.25)  # 25% on holidays
  else:
    price_after_discount = total_price * (1 - 0.10)  # 10% otherwise
  return price_after_discount
```

```python
# 5. Buy-One-Get-One-Free
def buy_one_get_one_free(num_items):
  if num_items % 2 == 0:  # Even number of items
    items_to_pay_for = num_items // 2  # Pay for half
  else:
    items_to_pay_for = num_items
  return items_to_pay_for
```

```python
# 6. Sales Tax
def sales_tax(price):
  if price > 500:
    total_price = price * (1 + 0.15)  # 15% luxury tax
  else:
    total_price = price * (1 + 0.08)  # 8% standard tax
  return total_price
```

```python
# 7. Income Tax
def income_tax(annual_income):
  if annual_income > 50000:
    tax_amount = annual_income * 0.20  # 20% tax
  else:
    tax_amount = annual_income * 0.10  # 10% tax
  return tax_amount
```

```python
# 8. Tax Bracket
def tax_bracket(income):
  if income < 30000:
    bracket = "Low Tax"
  elif 30000 <= income < 100000:
    bracket = "Medium Tax"
  else:
    bracket = "High Tax"
  return bracket
```

```python
# 9. VAT Calculation
def vat_calculation(is_essential, price):
  if is_essential:
    final_price = price * (1 + 0.05)  # 5% VAT
  else:
    final_price = price * (1 + 0.12)  # 12% VAT
  return
```

```python
# 11. Free Shipping
def free_shipping(total_purchase):
  if total_purchase > 50:
    total_amount = total_purchase  # Free shipping
  else:
```

```python
    total_amount = total_purchase + 5   # $5 shipping
    return total_amount


# 12. Discount Code
def discount_code(total_amount, discount_code_entered):
    if discount_code_entered == "DISCOUNT10":
        total_amount *= (1 - 0.10)   # Apply 10% discount
    return total_amount


# 13. Tiered Discounts
def tiered_discounts(total_price):
    if 0 <= total_price < 50:
        discount = 0   # No discount
    elif 50 <= total_price < 100:
        discount = 0.10   # 10% discount
    else:
        discount = 0.20   # 20% discount
    return total_price * (1 - discount)


# 14. Minimum Purchase Requirement
def minimum_purchase(total_amount):
    if total_amount < 20:
        return "Minimum purchase of $20 is required."
    else:
        return total_amount


# 15. Loyalty Points
def loyalty_points(is_loyal, purchase_amount):
    if is_loyal:
        points = purchase_amount * 2   # Double points for loyal members
    else:
        points = purchase_amount   # Standard points
    return points


# 16. Travel Discount
def travel_discount(distance, ticket_price):
    if distance > 500:
        ticket_price *= (1 - 0.20)   # 20% discount
    return ticket_price


# 17. Child or Senior Discount
def age_discount(age, ticket_price):
    if age < 12 or age > 60:
        ticket_price *= (1 - 0.15)   # 15% discount
    return ticket_price


# 18. Ticket Type Pricing
def ticket_type_pricing(is_weekend, ticket_price):
    if is_weekend:
        ticket_price *= (1 + 0.10)   # 10% surcharge
    return ticket_price


# 19. Baggage Fee
def baggage_fee(baggage_weight):
    if baggage_weight > 20:
        extra_weight = baggage_weight - 20
        fee = extra_weight * 10   # $10 per extra kg
    else:
        fee = 0
    return fee


# 20. Early Bird Discount
def early_bird_discount(days_in_advance, ticket_price):
    if days_in_advance > 30:
        ticket_price *= (1 - 0.10)   # 10% discount
    return ticket_price


# 21. Pass or Fail
def pass_or_fail(score):
    if score >= 40:
        return "Pass"
    else:
        return "Fail"


# 22. Grade Assignment
def grade_assignment(score):
    if score >= 90:
        grade = "A"
    elif 75 <= score <= 89:
        grade = "B"
    elif 50 <= score <= 74:
```

```
        grade = "C"
    else:
        grade = "F"
    return grade


# 23. Bonus Marks
def bonus_marks(all_assignments_completed, score):
    if all_assignments_completed:
        score += 5
    return score


# 24. Attendance Eligibility
def attendance_eligibility(attendance_percentage):
    if attendance_percentage >= 75:
        return "Eligible"
    else:
        return "Not Eligible"


# 25. Scholarship Eligibility
def scholarship_eligibility(grade, annual_family_income):
    if grade == "A" and annual_family_income < 30000:
        return "Eligible"
    else:
        return "Not Eligible"
```