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# Define the product catalog as a list of dictionaries
cart = []

def list_products():
    """List all products in the catalog"""
    print("\nProduct List:")
    for product in products:
        print(f"ID: {product['id']}, Name: {product['name']}, Price: {product['price']:.2f}")

def add_to_cart(product_id, quantity):
    """Add a product to the cart"""
    for product in products:
        if product['id'] == product_id:
            cart.append((product_id, quantity))
            print(f"Added {quantity} of {product['name']} to the cart.")
            return
    print("Product not found.")

def view_cart():
    """View all items in the cart"""
    if not cart:
        print("\nYour cart is empty.")
        return

    print("\nShopping Cart:")
    for item in cart:
        product = next((prod for prod in products if prod['id'] == item[0]), None)
        if product:
            print(f"Product ID: {product['id']}, Name: {product['name']}, Quantity: {item[1]}")

def checkout():
    """Calculate the total price of items in the cart and clear the cart"""
    total = 0.0
    for item in cart:
        product = next((prod for prod in products if prod['id'] == item[0]), None)
        if product:
            total += product['price'] * item[1]

    print(f"\nTotal amount: {total:.2f}")
    cart.clear()

def main():
    while True:
        print("\n1. List Products")
        print("2. Add to Cart")
        print("3. View Cart")
        print("4. Checkout")
        print("5. Exit")
        choice = input("Enter your choice: ")

        if choice == '1':
            list_products()
        elif choice == '2':
            product_id = int(input("Enter Product ID to add to cart: "))
            quantity = int(input("Enter Quantity: "))
            add_to_cart(product_id, quantity)
        elif choice == '3':
            view_cart()
        elif choice == '4':
            checkout()
        elif choice == '5':
            break

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        view_cart()
    elif choice == '4':
        checkout()
    elif choice == '5':
        break
    else:
        print("Invalid choice, please try again.")
if "__main__":
    main()
```